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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	DEC 01	ChemPort single article sales feature unavailable
NEWS 3	FEB 02	Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS 4	FEB 02	GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS 5	FEB 06	Patent sequence location (PSL) data added to USGENE
NEWS 6	FEB 10	COMPENDEX reloaded and enhanced
NEWS 7	FEB 11	WTEXTILES reloaded and enhanced
NEWS 8	FEB 19	New patent-examiner citations in 300,000 CA/CAplus patent records provide insights into related prior art
NEWS 9	FEB 19	Increase the precision of your patent queries -- use terms from the IPC Thesaurus, Version 2009.01
NEWS 10	FEB 23	Several formats for image display and print options discontinued in USPATFULL and USPAT2
NEWS 11	FEB 23	MEDLINE now offers more precise author group fields and 2009 MeSH terms
NEWS 12	FEB 23	TOXCENTER updates mirror those of MEDLINE - more precise author group fields and 2009 MeSH terms
NEWS 13	FEB 23	Three million new patent records blast AEROSPACE into STN patent clusters
NEWS 14	FEB 25	USGENE enhanced with patent family and legal status display data from INPADOCDB
NEWS 15	MAR 06	INPADOCDB and INPAFAMDB enhanced with new display formats
NEWS 16	MAR 11	EPFULL backfile enhanced with additional full-text applications and grants
NEWS 17	MAR 11	ESBIOBASE reloaded and enhanced
NEWS 18	MAR 20	CAS databases on STN enhanced with new super role for nanomaterial substances
NEWS 19	MAR 23	CA/CAplus enhanced with more than 250,000 patent equivalents from China
NEWS 20	MAR 30	IMSPATENTS reloaded and enhanced
NEWS 21	APR 03	CAS coverage of exemplified prophetic substances enhanced
NEWS 22	APR 07	STN is raising the limits on saved answers
NEWS 23	APR 24	CA/CAplus now has more comprehensive patent assignee information
NEWS 24	APR 26	USPATFULL and USPAT2 enhanced with patent assignment/reassignment information
NEWS 25	APR 28	CAS patent authority coverage expanded
NEWS 26	APR 28	ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS 27	APR 28	Limits doubled for structure searching in CAS REGISTRY
NEWS 28	MAY 08	STN Express, Version 8.4, now available
NEWS 29	MAY 11	STN on the Web enhanced

NEWS 30 MAY 11 BEILSTEIN substance information now available on STN Easy

NEWS EXPRESS MAY 08 09 CURRENT WINDOWS VERSION IS V8.4, AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 13:27:59 ON 11 MAY 2009

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.22	0.22

FILE 'CAPLUS' ENTERED AT 13:28:13 ON 11 MAY 2009

FILE COVERS 1907 - 11 May 2009 VOL 150 ISS 20
FILE LAST UPDATED: 8 May 2009 (20090508/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate

=> file caslink

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.00	1.22

FILE 'CAPLUS' ENTERED AT 13:29:10 ON 11 MAY 2009
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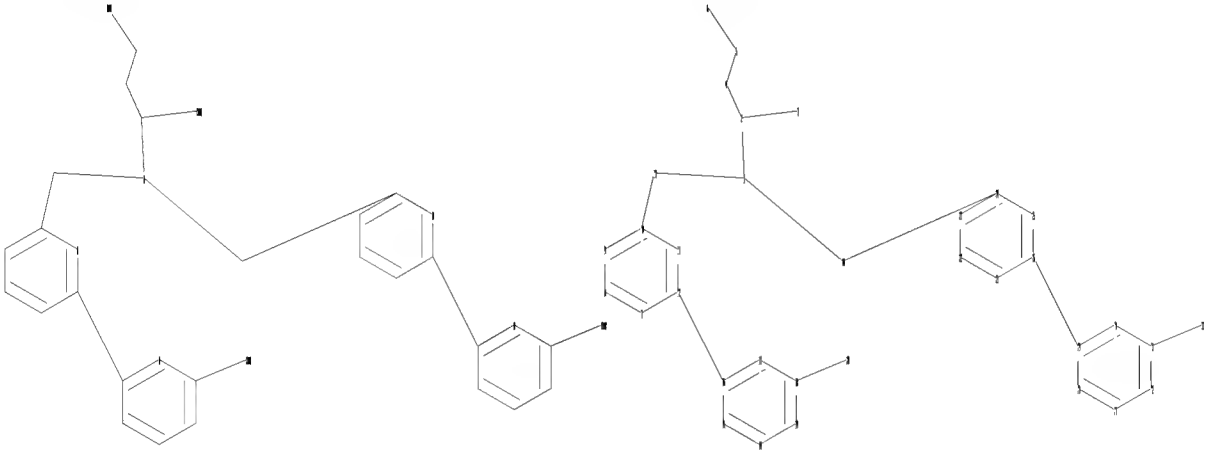
CLUSTER 'CASLINK' ENTERED

Predefined command sequences will be executed in
REGISTRY, MARPAT, and CAPLUS.

=>
Uploading C:\Program Files\STNEXP\Queries\10565804.str



chain nodes :
1 2 3 4 5 6 13 20 33 34
ring nodes :
7 8 9 10 11 12 14 15 16 17 18 19 21 22 23 24 25 26 27 28 29 30
31 32

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chain bonds :
1-2  1-13  1-34  2-3  2-4  4-5  5-6  10-13  12-16  18-20  24-34  26-29  31-33
ring bonds :
7-8  7-12  8-9  9-10  10-11  11-12  14-15  14-19  15-16  16-17  17-18  18-19  21-22
 21-26  22-23  23-24  24-25  25-26  27-28  27-32  28-29  29-30  30-31  31-32
exact/norm bonds :
1-2  1-13  1-34
exact bonds :
2-3  2-4  4-5  5-6  10-13  12-16  18-20  24-34  26-29  31-33
normalized bonds :
7-8  7-12  8-9  9-10  10-11  11-12  14-15  14-19  15-16  16-17  17-18  18-19  21-22
 21-26  22-23  23-24  24-25  25-26  27-28  27-32  28-29  29-30  30-31  31-32


Match level :
1:CLASS  2:CLASS  3:CLASS  4:CLASS  5:CLASS  6:CLASS  7:Atom  8:Atom  9:Atom
10:Atom  11:Atom  12:Atom  13:CLASS  14:Atom  15:Atom  16:Atom  17:Atom  18:Atom
19:Atom  20:CLASS  21:Atom  22:Atom  23:Atom  24:Atom  25:Atom  26:Atom  27:Atom
28:Atom  29:Atom  30:Atom  31:Atom  32:Atom  33:CLASS  34:CLASS



L1      STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> s l1 sss sample

S L1 SSS SAM FILE=REGISTRY
SAMPLE SEARCH INITIATED 13:30:00 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -        8 TO ITERATE

100.0% PROCESSED        8 ITERATIONS                                 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:            8 TO      329
PROJECTED ANSWERS:               1 TO       80

L2            1 SEA SSS SAM L1
   1 FILES SEARCHED...

S L2 SSS SAM FILE=MARPAT
SAMPLE SEARCH INITIATED 13:30:01 FILE 'MARPAT'
SAMPLE SCREEN SEARCH COMPLETED -      255 TO ITERATE

100.0% PROCESSED      255 ITERATIONS                                 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         4147 TO     6053
PROJECTED ANSWERS:               0 TO        0
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L3            0 SEA SSS SAM L1
   1 FILES SEARCHED...

=> s l1 sss full

S L1 SSS FUL FILE=REGISTRY
FULL SEARCH INITIATED 13:30:54 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      224 TO ITERATE

100.0% PROCESSED      224 ITERATIONS                                 4 ANSWERS
SEARCH TIME: 00.00.01

L4            4 SEA SSS FUL L1
   1 FILES SEARCHED...

S L4 SSS FUL FILE=MARPAT
FULL SEARCH INITIATED 13:30:55 FILE 'MARPAT'
FULL SCREEN SEARCH COMPLETED -     5280 TO ITERATE

 99.2% PROCESSED     5239 ITERATIONS                                 1 ANSWERS

 99.7% PROCESSED     5266 ITERATIONS                                 1 ANSWERS

 99.7% PROCESSED     5266 ITERATIONS                                 1 ANSWERS

100.0% PROCESSED     5280 ITERATIONS  (     1 INCOMPLETE)          2 ANSWERS
SEARCH TIME: 00.01.04

L5            2 SEA SSS FUL L1
   1 FILES SEARCHED...

S L4 FILE=CAPLUS
L6           2 FILE CAPLUS
   1 FILES SEARCHED...

SET DUPORDER FILE
SET COMMAND COMPLETED

DUP REM L5 L6
PROCESSING COMPLETED FOR L5
PROCESSING COMPLETED FOR L6
L7            3 DUP REM L5 L6 (1 DUPLICATE REMOVED)
                ANSWERS '1-2' FROM FILE MARPAT
                ANSWER '3' FROM FILE CAPLUS

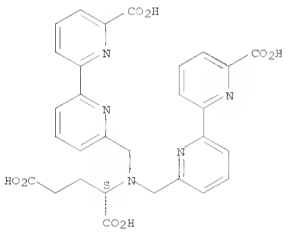
=> d l4 1-4 all
```

L4 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN
RN 827572-33-8 REGISTRY
ED Entered STN: 08 Feb 2005
CN L-Glutamic acid, N,N-bis[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]- (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H25 N5 O8
CI COM
SR CA

Ring System Data

Elemental Analysis EA	Elemental Sequence ES	Size of the Rings SZ	Ring System Formula RF	Ring Identifier RID	RID Occurrence Count
C5N	NC5	6	C5N	46.156.30	4

Absolute stereochemistry.



Predicted Properties (PPROP)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	1.0	pH 1 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 2 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 3 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 4 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 5 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 6 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 7 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 8 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 9 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 10 25 deg C	(1)
Boiling Point (BP)	849.8+/-65.0 deg C	760 Torr	(1)
Density (DEN)	1.462+/-0.06 g/cm**3	20 deg C	(1)

L4 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN (Continued)

		760 Torr	
Enthalpy of Vap. (HVAP)	129.41+/-3.0 kJ/mol	760 Torr	(1)
Flash Point (FP)	467.7+/-34.3 deg C		(1)
Freely Rotatable Bonds (FRB)	13		(1)
H acceptors (HAC)	13		(1)
H donors (HD)	4		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	17		(1)
Koc (KOC)	1.0	pH 1 25 deg C	(1)
Koc (KOC)	1.0	pH 2 25 deg C	(1)
Koc (KOC)	1.0	pH 3 25 deg C	(1)
Koc (KOC)	1.0	pH 4 25 deg C	(1)
Koc (KOC)	1.0	pH 5 25 deg C	(1)
Koc (KOC)	1.0	pH 6 25 deg C	(1)
Koc (KOC)	1.0	pH 7 25 deg C	(1)
Koc (KOC)	1.0	pH 8 25 deg C	(1)
Koc (KOC)	1.0	pH 9 25 deg C	(1)
Koc (KOC)	1.0	pH 10 25 deg C	(1)
LOGD (LOGD)	-2.78	pH 1 25 deg C	(1)
LOGD (LOGD)	-2.04	pH 2 25 deg C	(1)
LOGD (LOGD)	-1.93	pH 3 25 deg C	(1)
LOGD (LOGD)	-2.62	pH 4 25 deg C	(1)
LOGD (LOGD)	-4.28	pH 5 25 deg C	(1)
LOGD (LOGD)	-5.59	pH 6 25 deg C	(1)
LOGD (LOGD)	-6.18	pH 7 25 deg C	(1)
LOGD (LOGD)	-6.30	pH 8 25 deg C	(1)
LOGD (LOGD)	-6.32	pH 9 25 deg C	(1)
LOGD (LOGD)	-6.32	pH 10 25 deg C	(1)
LOGP (LOGP)	0.431+/-0.885	25 deg C	(1)
Mass Intrinsic Solubility (ISLB.MASS)	8.0 g/L	25 deg C	(1)
Mass Solubility (SLB.MASS)	4.1 g/L	pH 1 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.41 g/L	pH 2 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.31 g/L	pH 3 25 deg C	(1)
Mass Solubility (SLB.MASS)	1.6 g/L	pH 4 25 deg C	(1)
Mass Solubility (SLB.MASS)	210 g/L	pH 5 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 6 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 7 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 8 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 9 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 10 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.43 g/L	Unbuffered Water	(1)
		pH 3.38	
		25 deg C	
Molar Intrinsic Solubility (ISLB.MOL)	0.014 mol/L	25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0072 mol/L	pH 1 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00072 mol/L	pH 2 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00054 mol/L	pH 3 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0028 mol/L	pH 4 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.37 mol/L	pH 5 25 deg C	(1)
Molar Solubility (SLB.MOL)	1.75 mol/L	pH 6 25 deg C	(1)
Molar Solubility (SLB.MOL)	1.75 mol/L	pH 7 25 deg C	(1)
Molar Solubility (SLB.MOL)	1.75 mol/L	pH 8 25 deg C	(1)
Molar Solubility (SLB.MOL)	1.75 mol/L	pH 9 25 deg C	(1)
Molar Solubility (SLB.MOL)	1.75 mol/L	pH 10 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00075 mol/L	Unbuffered Water	(1)
		pH 3.38	
		25 deg C	

L4 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN (Continued)

Molar Volume (MVOL)	390.8+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	571.54		(1)
PKA (PKA)	0.37+/-0.50	Most Acidic	(1)
		25 deg C	
PKA (PKA)	5.12+/-0.50	Most Basic	(1)
		25 deg C	
Polar Surface Area (PSA)	204.00 A**2		(1)
Vapor Pressure (VP)	1.02E-30 Torr	25 deg C	(1)

This substance may exist in multiple tautomeric forms. The predicted property values in this table are calculated based upon the displayed form and may therefore differ from experimental values based on the actual tautomeric ratio at equilibrium.

(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.19 ((C) 1994-2009 ACD/Labs)

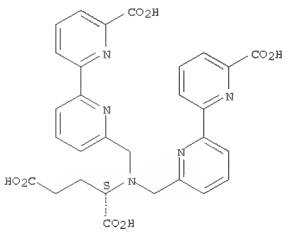
See HELP PROPERTIES for information about property data sources in REGISTRY.

L4 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN
RN 827305-51-1 REGISTRY
ED Entered STN: 08 Feb 2005
CN L-Glutamic acid, N,N-bis[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]-, trihydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H25 N5 O8 . 3 Cl H
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
CRN (827572-33-8)

Ring System Data

Elemental Analysis EA	Elemental Sequence ES	Size of the Rings SZ	Ring System Formula RF	Ring Identifier RID	RID Occurrence Count
C5N	NC5	6	C5N	46.156.30	4

Absolute stereochemistry.



●3 HCl

Experimental Property Tags (ETAG)

PROPERTY	NOTE
Carbon-13 NMR Spectra	(1) CAS
Mass Spectra	(1) CAS
Proton NMR Spectra	(1) CAS

(1) Charbonniere, Loic; FR 2857967 A1 2005 CAPLUS

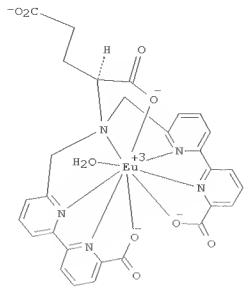
See HELP PROPERTIES for information about property data sources in REGISTRY.
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 142:168342 CA
TI Lanthanide bis(carboxybipyridylmethyl)aminoalkanedicarboxylate complexes and analogs, their preparation and their uses as fluorescence markers and NMR relaxation agents
IN Charbonniere, Loic; Ziessel, Raymond; Wiebel, Nicolas; Roda, Aldo; Guardigli, Massimo
PA Centre National de la Recherche Scientifique, Fr.; Universite Louis Pasteur de Strasbourg
SO Fr. Demande, 50 pp.
CODEN: FRXXBL
DT Patent
LA French
IC ICM C07D401-14
ICS C07F009-58; C07D213-55; C07D213-79; C07D207-36
CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 9, 27, 73, 79, 80
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2857967	A1	20050128	FR 2003-9158	20030725
	CA 2533698	A1	20050217	CA 2004-2533698	20040720
	WO 2005014581	A2	20050217	WO 2004-FR1921	20040720
	WO 2005014581	A3	20050331		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1648883	A2	20060426	EP 2004-785982	20040720
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	JP 2006528934	T	20061228	JP 2006-521610	20040720
	MX 2006000843	A	20060720	MX 2006-843	20060123
	US 20080044923	A1	20080221	US 2006-565804	20060125
PRAI	FR 2003-9158		20030725		
	WO 2004-FR1921		20040720		

GI



I

AB The invention relates to ligands which chelate lanthanides for use as fluorescence markers or as relaxation agents in NMR imaging. Compds. claimed are R1-X-CR2R3-NR4R5 [R1 = functional group; X = bond, hydrocarbon chain containing at least one alkylene group, heteroatom-containing alkenylene group, or arylene group; R2 = anionic group (A2) at neutral pH or C1-4 alkylene or alkenylene groups containing at least one A2, which may contain a heteroatom in the chain; R3 = H, C1-5 alkylene or alkenylene which may contain a heteroatom in the chain and at least one anionic group (A3) at neutral pH; R4 = substituent having light absorption properties and forms three chelate cycles with a lanthanide; R5 = substituent which allows formation of three chelate cycles with a lanthanide]. The group R1 is capable of reacting with functions present in proteins, antibodies, minerals or organic substances. Example lanthanide compds., e.g., I (Na salt), are prepared with bis(carboxybipyridylmethyl)aminoalkanedicarboxylate ligands.
ST lanthanide carboxybipyridylmethylaminoalkanedicarboxylate prepn fluorescence marker NMR relaxation agent; glutamate carboxybipyridylmethyl prepn complexation lanthanide
IT Imaging agents
(NMR contrast; lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as NMR relaxation agents)
IT Fluorescent substances
(fluorescent markers; lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates)
IT Shift reagents
(lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates)
IT Rare earth complexes
RL: ARG (Analytical reagent use); DGN (Diagnostic use); SPN (Synthetic

preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)
IT Albumins, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(serum; preparation of bovine serum albumin conjugates with lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylate chelate as fluorescent marker)
IT 827601-09-2P 827601-10-5P 827601-11-6P
RL: ARG (Analytical reagent use); DGN (Diagnostic use); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)
IT 827305-59-9P 827305-63-5P 827599-56-4P 827600-21-5P 827601-12-7P
RL: ARG (Analytical reagent use); DGN (Diagnostic use); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)
IT 762-04-9, Diethyl phosphite 3886-69-9, (+)-α-Methylbenzylamine 6066-82-6, N-Hydroxysuccinimide 16115-80-3, Dimethyl aminomalonate hydrochloride 23150-65-4, Dimethyl L-glutamate hydrochloride 130897-00-6, 6-Bromo-6'-methyl-2,2'-bipyridine
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)
IT 656258-97-8P 827305-51-1P 827305-53-3P 827305-55-5P 827305-61-3P 827305-62-4P 827305-65-7P 827305-66-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)
IT 827305-64-6P 827599-56-4DP, conjugate with bovine serum albumin 827600-21-5DP, conjugate with bovine serum albumin
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Barcena, H; ORGANIC LETTERS 2003, V5(5), P709 CAPLUS
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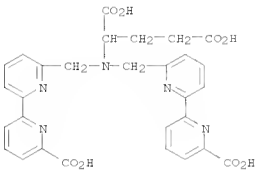
L4 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN
RN 785048-12-6 REGISTRY
ED Entered STN: 21 Nov 2004
CN Glutamic acid, N,N-bis[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]- (CA INDEX NAME)
MF C29 H25 N5 O8
CI COM
SR CA

Ring System Data

Elemental Analysis EA	Elemental Sequence ES	Size of the Rings SZ	Ring System Formula RF	Ring Identifier RID	RID Occurrence Count
C5N	NC5	6	C5N	46.156.30	4



Predicted Properties (PPROP)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	1.0	pH 1 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 2 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 3 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 4 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 5 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 6 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 7 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 8 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 9 25 deg C	(1)
Bioconc. Factor (BCF)	1.0	pH 10 25 deg C	(1)
Boiling Point (BP)	849.8+/-65.0 deg C	760 Torr	(1)
Density (DEN)	1.462+/-0.06 g/cm**3	20 deg C	(1)
		760 Torr	
Enthalpy of Vap. (HVAP)	129.41+/-3.0 kJ/mol	760 Torr	(1)
Flash Point (FP)	467.7+/-34.3 deg C		(1)
Freely Rotatable Bonds (FRB)	13		(1)
H acceptors (HAC)	13		(1)
H donors (HD)	4		(1)
Hydrogen Donors/Acceptors Sum (HDAS)	17		(1)

L4 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN (Continued)

Koc (KOC)	1.0	pH 1 25 deg C	(1)
Koc (KOC)	1.0	pH 2 25 deg C	(1)
Koc (KOC)	1.0	pH 3 25 deg C	(1)
Koc (KOC)	1.0	pH 4 25 deg C	(1)
Koc (KOC)	1.0	pH 5 25 deg C	(1)
Koc (KOC)	1.0	pH 6 25 deg C	(1)
Koc (KOC)	1.0	pH 7 25 deg C	(1)
Koc (KOC)	1.0	pH 8 25 deg C	(1)
Koc (KOC)	1.0	pH 9 25 deg C	(1)
Koc (KOC)	1.0	pH 10 25 deg C	(1)
LOGD (LOGD)	-2.78	pH 1 25 deg C	(1)
LOGD (LOGD)	-2.04	pH 2 25 deg C	(1)
LOGD (LOGD)	-1.93	pH 3 25 deg C	(1)
LOGD (LOGD)	-2.62	pH 4 25 deg C	(1)
LOGD (LOGD)	-4.28	pH 5 25 deg C	(1)
LOGD (LOGD)	-5.59	pH 6 25 deg C	(1)
LOGD (LOGD)	-6.18	pH 7 25 deg C	(1)
LOGD (LOGD)	-6.30	pH 8 25 deg C	(1)
LOGD (LOGD)	-6.32	pH 9 25 deg C	(1)
LOGD (LOGD)	-6.32	pH 10 25 deg C	(1)
LOGP (LOGP)	0.431+/-0.885	25 deg C	(1)
Mass Intrinsic Solubility (ISLB.MASS)	8.0 g/L	25 deg C	(1)
Mass Solubility (SLB.MASS)	4.1 g/L	pH 1 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.41 g/L	pH 2 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.31 g/L	pH 3 25 deg C	(1)
Mass Solubility (SLB.MASS)	1.6 g/L	pH 4 25 deg C	(1)
Mass Solubility (SLB.MASS)	210 g/L	pH 5 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 6 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 7 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 8 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 9 25 deg C	(1)
Mass Solubility (SLB.MASS)	1000 g/L	pH 10 25 deg C	(1)
Mass Solubility (SLB.MASS)	0.43 g/L	Unbuffered Water	(1)
		pH 3.38	
		25 deg C	
Molar Intrinsic Solubility (ISLB.MOL)	0.014 mol/L	25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0072 mol/L	pH 1 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00072 mol/L	pH 2 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00054 mol/L	pH 3 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.0028 mol/L	pH 4 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.37 mol/L	pH 5 25 deg C	(1)
Molar Solubility (SLB.MOL)	1.75 mol/L	pH 6 25 deg C	(1)
Molar Solubility (SLB.MOL)	1.75 mol/L	pH 7 25 deg C	(1)
Molar Solubility (SLB.MOL)	1.75 mol/L	pH 8 25 deg C	(1)
Molar Solubility (SLB.MOL)	1.75 mol/L	pH 9 25 deg C	(1)
Molar Solubility (SLB.MOL)	1.75 mol/L	pH 10 25 deg C	(1)
Molar Solubility (SLB.MOL)	0.00075 mol/L	Unbuffered Water	(1)
		pH 3.38	
		25 deg C	
Molar Volume (MVOL)	390.8+/-3.0 cm**3/mol	20 deg C	(1)
		760 Torr	
Molecular Weight (MW)	571.54		(1)
PKA (PKA)	0.37+/-0.50	Most Acidic	(1)
		25 deg C	
PKA (PKA)	5.12+/-0.50	Most Basic	(1)
		25 deg C	
Polar Surface Area (PSA)	204.00 A**2		(1)

L4 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN (Continued)

Vapor Pressure (VP)	1.02E-30 Torr	25 deg C	(1)

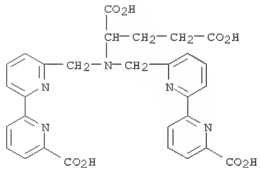
(1) Calculated using Advanced Chemistry Development (ACD/Labs) Software V8.19 ((C) 1994-2009 ACD/Labs)

See HELP PROPERTIES for information about property data sources in REGISTRY.

L4 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN
RN 690630-26-3 REGISTRY
ED Entered STN: 08 Jun 2004
CN Glutamic acid, N,N-bis[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]-, trihydrochloride (9CI) (CA INDEX NAME)
MF C29 H25 N5 O8 . 3 Cl H
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: ANST (Analytical study); PREP (Preparation); RACT (Reactant or reagent)
CRN (785048-12-6)

Ring System Data

Elemental Analysis EA	Elemental Sequence ES	Size of the Rings SZ	Ring System Formula RF	Ring Identifier RID	RID Occurrence Count
C5N	NC5	6	C5N	46.156.30	4



●3 HCl

Experimental Property Tags (ETAG)

PROPERTY	NOTE
Carbon-13 NMR Spectra	(1) CAS
Mass Spectra	(1) CAS
Proton NMR Spectra	(1) CAS

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L4 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN (Continued)

See HELP PROPERTIES for information about property data sources in REGISTRY.
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1

AN 140:420226 CA
TI Engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging
AU Weibel, Nicolas; Charbonniere, Loiec J.; Guardigli, Massimo; Roda, Aldo; Ziessel, Raymond
CS Laboratoire de Chimie Moleculaire, Ecole de Chimie Polymeres et Materiaux/ULP, Strasbourg, 67087, Fr.
SO Journal of the American Chemical Society (2004), 126(15), 4888-4896
CODEN: JACSAT; ISSN: 0002-7863
PB American Chemical Society
DT Journal
LA English
CC 9-15 (Biochemical Methods)
AB The synthesis of a new ligand LH4 based on a glutamic acid skeleton bis-functionalized on its nitrogen atom by 6-methylene-6'-carboxy-2,2'-bipyridine chromophoric units is described. UV-vis spectrophotometric titrns. revealed the formation of 1:1 M:L complexes with lanthanide(III) cations, and complexation of LH4 with equimolar amts. of hydrated LnCl3 salts (Ln = Eu, Gd, and Tb) gave water-soluble and stable complexes of the general formula [LnL(H2O)]Na, which were characterized by elemental anal., IR, UV-vis absorption spectroscopy, 1H NMR (Ln = Eu), and mass spectrometry. The conditional stability constant for formation of the [EuL(H2O)]Na complex was determined by competitive complexation expts. to be log K = 16.5±0.6 in 0.01 M TRIS/HCl buffer (pH = 7.0). In water solution, the [EuL(H2O)]Na and [TbL(H2O)]Na complexes were highly luminescent with quantum yields of 8% and 31%, resp., despite the presence of .apprx.. One water mol. in the first coordination sphere of the metal ions. Activation of the appended carboxylate function of the glutamate moiety in the form of an N-hydroxysuccinimidyl ester allows for the covalent linking of the complexes to primary amino groups of biol. compds. Bovine serum albumin (BSA) was labeled with both Eu or Tb complexes, and the Ln-BSA conjugates were characterized by UV-vis absorption and emission spectroscopy and MALDI-TOF mass spectrometry. Labeling ratios (number of complex mols. per BSA) of .apprx.8:1 and 7:1 were established for Eu-BSA and Tb-BSA, resp. The suitability of the tagged compound for use in bioanal. time-resolved luminescence microscopy was established by comparison with fluorescein-labeled probes.
ST engineering luminescent lanthanide tag protein labeling
IT Luminescence
(engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging)
IT Time-of-flight mass spectrometry
(matrix-assisted photodesorption-photoionization; engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging)
IT Laser ionization mass spectrometry
(photodesorption, matrix-assisted, time-of-flight; engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging)
IT Laser desorption mass spectrometry
(photoionization, matrix-assisted, time-of-flight; engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging)
IT Albumins, analysis
RL: ANT (Analyte); ANST (Analytical study)
(serum; engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging)
IT Titration
(spectrophotometric; engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging)
IT 690630-26-3P
RL: ARU (Analytical role, unclassified); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant or reagent)
(engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging)
IT 691376-15-5P 691376-16-6P 691376-17-7P 691376-18-8P 691376-19-9P 691376-20-2P
RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging)
IT 1824-81-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging)
IT 617-65-2P, Glutamic acid 13515-99-6P 656258-97-8P 690630-24-1P 690630-25-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging)
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FULL ESTIMATED COST                                   290.29     291.51

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
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PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
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FILE 'REGISTRY' ENTERED AT 14:26:09 ON 11 MAY 2009

CLUSTER 'CASLINK' ENTERED

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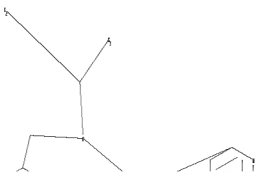

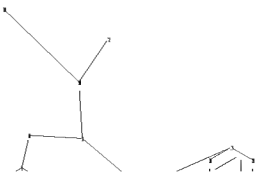

exact/norm bonds :
1-29 1-8 1-30 30-32 30-34
exact bonds :
5-8 7-11 13-15 19-29 21-24 26-28
normalized bonds :
2-3 2-7 3-4 4-5 5-6 6-7 9-10 9-14 10-11 11-12 12-13 13-14 16-17 16-21
17-18 18-19 19-20 20-21 22-23 22-27 23-24 24-25 25-26 26-27

G1:COOH,SO3H

G2:OH,COOH,NH3

Match level :
1:CLASS 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:CLASS 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:CLASS
29:CLASS 30:CLASS 32:CLASS 34:CLASS

L8 STRUCTURE UPLOADED

=> d
L8 HAS NO ANSWERS
L8 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

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FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          4529 TO     6511
PROJECTED ANSWERS:                0 TO        0

L10           0 SEA SSS SAM L8
   1 FILES SEARCHED...

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                                                       ENTRY    SESSION
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -1.56

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STN INTERNATIONAL SESSION SUSPENDED AT 14:27:11 ON 11 MAY 2009

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NEWS 19 MAR 23 CA/CAplus enhanced with more than 250,000 patent equivalents from China

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NEWS 22 APR 07 STN is raising the limits on saved answers

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NEWS 25 APR 28 CAS patent authority coverage expanded

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NEWS 27 APR 28 Limits doubled for structure searching in CAS REGISTRY

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This file contains CAS Registry Numbers for easy and accurate

=> e us2006-565804/ap

L1 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:1331524 CAPLUS

DN 144:65102

TI Positionally modified short interfering nucleic acids for inhibition of gene expression by RNA interference

IN Bhat, Balkrishen; Swayze, Eric; Prakash, Thazha P.; Allerson, Charles; Dande, Prasad; Griffey, Richard H.

PA Isis Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 190 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 49

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005120230	A2	20051222	WO 2004-US17485	20040603
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L1 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

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	US 20090048192	A1	20090219	US 2008-569955	20080909
PRAI	US 1996-659440	A2	19960606		
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	US 2000-479783	A1	20000107		
	US 2002-78949	A2	20020220		
	US 2002-423760P	P	20021105		
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	US 2003-503997P	P	20030918		
	US 2003-701265	A2	20031104		
	US 2004-17522	A	20040603		
	US 2004-859825	A	20040603		

L1 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

	WO 2004-US17485	W	20040603
	WO 2004-US17522	A	20040603
	US 2004-584045P	P	20040629
	US 2004-607927P	P	20040907
	US 2004-946147	A	20040920
	WO 2005-US19217	W	20050602
	WO 2005-US19219	W	20050602
	WO 2005-US19220	W	20050602

L1 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:1331514 CAPLUS

DN 144:65101

TI Chimeric gapped short interfering nucleic acids for inhibition of gene expression by RNA interference

IN Bhat, Balkrishen; Swayze, Eric; Allerson, Charles; Dande, Prasad; Prakash, Thazha P.; Griffey, Richard H.

PA Isis Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 125 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 49

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005121368	A1	20051222	WO 2004-US17522	20040603
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L1 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

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WO	2005121372	A2	20051222	WO 2005-US19220	20050602
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EP	1765415	A2	20070328	EP 2005-756325	20050602

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EP	1765416	A2	20070328	EP 2005-757632	20050602

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EP	1766071	A2	20070328	EP 2005-757763	20050602

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US	20070166734	A1	20070719	US 2006-565770	20061201
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PRAI	US 1996-659440	A2	19960606		
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	US 2004-946147	A	20040920		
	WO 2005-US19217	W	20050602		
	WO 2005-US19219	W	20050602		
	WO 2005-US19220	W	20050602		

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:219990 CAPLUS

DN 142:292472

TI Chimeric siRNA compounds and their use in gene modulation

IN Baker, Brenda F.; Eldrup, Anne B.; Manoharan, Muthiah; Bhat, Balkrishen; Griffey, Richard H.; Swayze, Eric E.; Crooke, Stanley T.

PA USA

SO U.S. Pat. Appl. Publ., 74 pp., Cont.-in-part of U.S. Ser. No. 701,265.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 49

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20050053976	A1	20050310	US 2004-859825	20040603
	US 5898031	A	19990427	US 1996-659440	19960606
	US 6107094	A	20000822	US 1997-870608	19970606
	EP 1600506	A2	20051130	EP 2004-78165	19970606
	EP 1600506	A3	20080709		

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	EP 1621545	A2	20060201	EP 2004-78164	19970606
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	US 20040147023	A1	20040729	US 2003-701265	20031104
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WO	20051213711	A3	20080124		

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WO	2005121372	A2	20051222	WO 2005-US19220	20050602

L1 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

WO	2005121372	A3	20060413		

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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP	1765415	A2	20070328	EP 2005-756325	20050602

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EP	1765416	A2	20070328	EP 2005-757632	20050602

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EP	1766071	A2	20070328	EP 2005-757763	20050602

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L1 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

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	WO 2005-US19219	W	20050602
	WO 2005-US19220	W	20050602

L1 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:77721 CAPLUS
DN 142:168342
TI Lanthanide bis(carboxybipyridylmethyl)aminoalkanedicarboxylate complexes and analogs, their preparation and their uses as fluorescence markers and NMR relaxation agents
IN Charbonniere, Loic; Ziessel, Raymond; Wiebel, Nicolas; Roda, Aldo; Guardigli, Massimo
PA Centre National de la Recherche Scientifique, Fr.; Universite Louis Pasteur de Strasbourg
SO Fr. Demande, 50 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2857967	A1	20050128	FR 2003-9158	20030725
	CA 2533698	A1	20050217	CA 2004-2533698	20040720
	WO 2005014581	A2	20050217	WO 2004-FR1921	20040720
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	US 20080044923	A1	20080221	US 2006-565804	20060125

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PRAI FR 2003-9158 A 20030725
WO 2004-FR1921 W 20040720
OS CASREACT 142:168342; MARPAT 142:168342
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L1 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN

IC ICM C07D401-14
ICS C07F009-58; C07D213-55; C07D213-79; C07D207-36

CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 9, 27, 73, 79, 80

ST lanthanide carboxybipyridylmethylaminoalkanedicarboxylate prepn fluorescence marker NMR relaxation agent; glutamate carboxybipyridylmethyl prepn complexation lanthanide

IT Imaging agents
(NMR contrast; lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as NMR relaxation agents)

IT Fluorescent substances
(fluorescent markers; lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates)

IT Shift reagents
(lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates)

IT Rare earth complexes
RL: ARG (Analytical reagent use); DGN (Diagnostic use); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)

IT Albumins, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(serum; preparation of bovine serum albumin conjugates with lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylate chelate as fluorescent marker)

IT 827601-09-2P 827601-10-5P 827601-11-6P
RL: ARG (Analytical reagent use); DGN (Diagnostic use); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)

IT 827305-59-9P 827305-63-5P 827599-56-4P 827600-21-5P 827601-12-7P
RL: ARG (Analytical reagent use); DGN (Diagnostic use); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)

IT 762-04-9, Diethyl phosphite 3886-69-9, (+)-α-Methylbenzylamine 6066-82-6, N-Hydroxysuccinimide 16115-80-3, Dimethyl aminomalonate hydrochloride 23150-65-4, Dimethyl L-glutamate hydrochloride 130897-00-6, 6-Bromo-6'-methyl-2,2'-bipyridine
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)

IT 656258-97-8P 827305-51-1P 827305-53-3P 827305-55-5P 827305-61-3P 827305-62-4P 827305-65-7P 827305-66-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)

L1 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

IT 827305-64-6P 827599-56-4DP, conjugate with bovine serum albumin 827600-21-5DP, conjugate with bovine serum albumin
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)

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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
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FULL ESTIMATED COST                                      11.62      11.84

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DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

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=> S 827601-09-2/RN

L2            1 827601-09-2/RN

=> SET NOTICE 1 DISPLAY

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YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
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L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 827601-09-2 REGISTRY

CN Europate(1-), aqua[N,N-bis[[6'-(carboxy-κO)[2,2'-bipyridin]-6-yl-κN1,κN1']methyl]-L-glutamato(4-)-κN,κO1]-, sodium (1:1) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Europate(1-), aqua[N,N-bis[[6'-(carboxy-κO)[2,2'-bipyridin]-6-yl-κN1,κN1']methyl]-L-glutamato(4-)-κN,κO1]-, sodium (9CI)

MF C29 H23 Eu N5 O9 . Na

CI CCS

SR CA

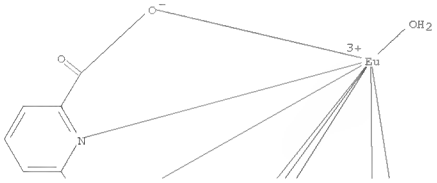
LC STN Files: CA, CAPLUS, CASREACT

DT.CA CAplus document type: Patent

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

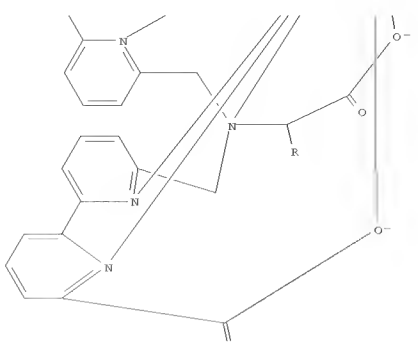
CRN (828241-09-4)

PAGE 1-A



L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN (Continued)

PAGE 2-A



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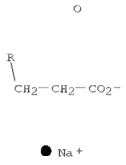

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

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FULL ESTIMATED COST                                       2.53      14.37

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DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

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L3           1 827601-10-5/RN

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THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
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L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 827601-10-5 REGISTRY

CN Terbate(1-), aqua[N,N-bis[[6'-(carboxy-κO)[2,2'-bipyridin]-6-yl-κN1,κN1']methyl]-L-glutamato(4-)-κN,κO1]-, sodium (9CI) (CA INDEX NAME)

MF C29 H23 N5 O9 Tb . Na

CI CCS

SR CA

LC STN Files: CA, CAPLUS, CASREACT

DT.CA CAplus document type: Patent

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

CRN (828241-10-7)

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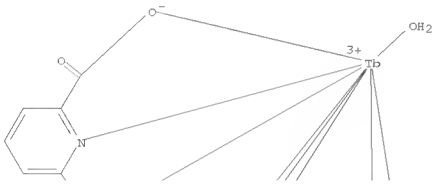

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN (Continued)

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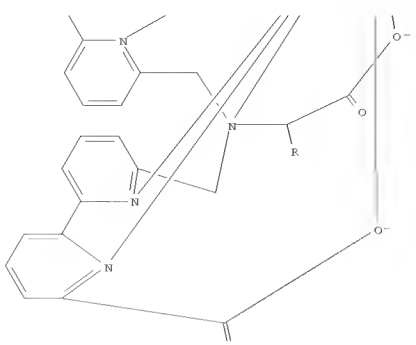

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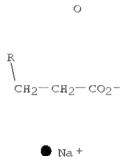

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SET COMMAND COMPLETED

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FULL ESTIMATED COST                                       2.53      16.90

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DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

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L4           1 827305-59-9/RN

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THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
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L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 827305-59-9 REGISTRY

CN Europium, aqua[[6',6'''-[[[(1S)-1-(carboxy-κO)-4-[[(1R)-1-phenylethyl]amino]-4-oxobutyl]imino-κN]bis(methylene)]bis[[2,2'-bipyridine]-6-carboxylato-κN1,κN1',κO6]](3-)]- (CA INDEX NAME)

MF C37 H33 Eu N6 O8

CI CCS

SR CA

LC STN Files: CA, CAPLUS, CASREACT

DT.CA CAplus document type: Patent

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

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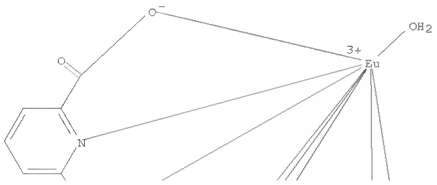

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN (Continued)

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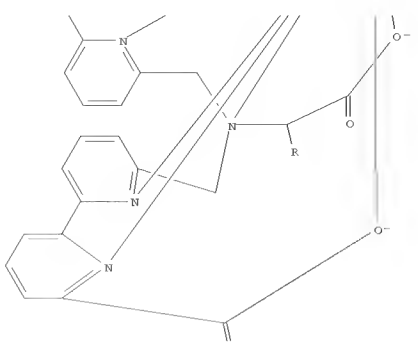

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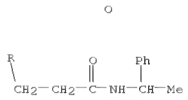

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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SET COMMAND COMPLETED

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=> FIL REGISTRY

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DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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L5           1 827305-63-5/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L5 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
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L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 827305-63-5 REGISTRY

CN Europate(1-), aqua[N,N-bis[[6'-[ethoxy(hydroxy-κO)phosphinyl][2,2'-bipyridin]-6-yl-κN1,κN1']methyl]-L-glutamato(4-)-κN,κO1]-, sodium (1:1) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Europate(1-), aqua[N,N-bis[[6'-[ethoxy(hydroxy-κO)phosphinyl][2,2'-bipyridin]-6-yl-κN1,κN1']methyl]-L-glutamato(4-)-κN,κO1]-, sodium (9CI)

MF C31 H33 Eu N5 O11 P2 . Na

CI CCS

SR CA

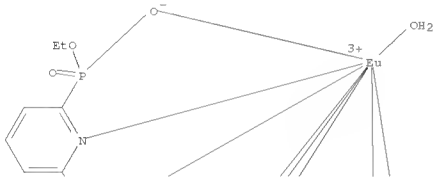
LC STN Files: CA, CAPLUS, CASREACT

DT.CA CAplus document type: Patent

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

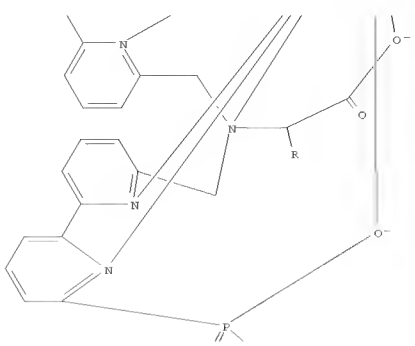
CRN (827572-35-0)

PAGE 1-A

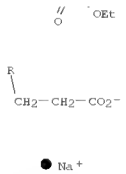


L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN (Continued)

PAGE 2-A



PAGE 3-A



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> FIL REGISTRY

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       2.53      21.96

FILE 'REGISTRY' ENTERED AT 09:12:07 ON 14 MAY 2009
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DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 656258-97-8/RN

L6            1 656258-97-8/RN

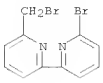
=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L6 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
```

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 656258-97-8 REGISTRY
CN 2,2'-Bipyridine, 6-bromo-6'-(bromomethyl)- (CA INDEX NAME)
OTHER NAMES:
CN 6-Bromo-6'-bromomethyl-2,2'-bipyridine
MF C11 H8 Br2 N2
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> FIL REGISTRY

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       2.53      24.49

FILE 'REGISTRY' ENTERED AT 09:12:33 ON 14 MAY 2009
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DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

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  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 827305-66-8/RN

L7           1 827305-66-8/RN

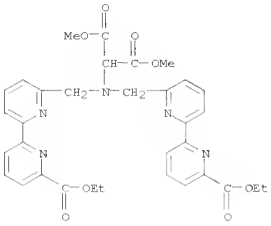
=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L7 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
```

L7 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 827305-66-8 REGISTRY
CN Propanedioic acid, [bis[[6'-(ethoxycarbonyl)[2,2'-bipyridin]-6-
    yl]methyl]amino]-, dimethyl ester (9CI) (CA INDEX NAME)
MF C33 H33 N5 O8
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> FIL REGISTRY

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       2.53      27.02

FILE 'REGISTRY' ENTERED AT 09:13:01 ON 14 MAY 2009
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DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

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  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 827305-65-7/RN

L8           1 827305-65-7/RN

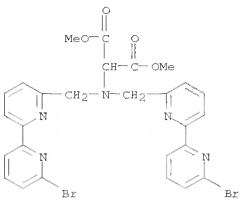
=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L8 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
```

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 827305-65-7 REGISTRY
CN Propanedioic acid, [bis[(6'-bromo[2,2'-bipyridin]-6-yl)methyl]amino]-, dimethyl ester (9CI) (CA INDEX NAME)
MF C27 H23 Br2 N5 O4
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> FIL REGISTRY

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                        ENTRY    SESSION
FULL ESTIMATED COST                                      2.53      29.55

FILE 'REGISTRY' ENTERED AT 09:13:40 ON 14 MAY 2009
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STRUCTURE FILE UPDATES:   13 MAY 2009  HIGHEST RN 1146612-21-6
DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

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  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 827305-62-4/RN

L9           1 827305-62-4/RN

=> SET NOTICE 1 DISPLAY

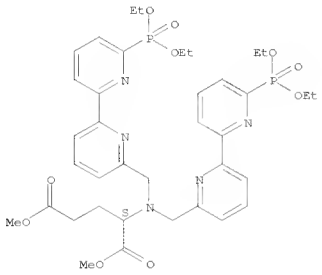
NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L9 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
```

L9 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 827305-62-4 REGISTRY
CN L-Glutamic acid, N,N-bis[[6'-(diethoxyphosphinyl)[2,2'-bipyridin]-6-yl]methyl]-, 1,5-dimethyl ester (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Glutamic acid, N,N-bis[[6'-(diethoxyphosphinyl)[2,2'-bipyridin]-6-yl]methyl]-, dimethyl ester (9CI)
FS STEREOSEARCH
MF C37 H47 N5 O10 P2
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> FIL REGISTRY

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       2.53      32.08

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DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

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  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 827305-61-3/RN

L10          1 827305-61-3/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L10 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
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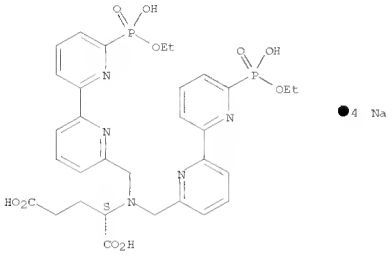
L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 827305-61-3 REGISTRY
CN L-Glutamic acid, N,N-bis[[6'-(ethoxyhydroxyphosphinyl)[2,2'-bipyridin]-6-yl]methyl]-, sodium salt (1:4) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Glutamic acid, N,N-bis[[6'-(ethoxyhydroxyphosphinyl)[2,2'-bipyridin]-6-yl]methyl]-, tetrasodium salt (9CI)
FS STEREOSEARCH
MF C31 H35 N5 O10 P2 . 4 Na
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
RL.NP Roles from non-patents: PRP (Properties)
CRN (827572-34-9)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

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=> FIL REGISTRY

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       2.53      34.61

FILE 'REGISTRY' ENTERED AT 09:14:48 ON 14 MAY 2009
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DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

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predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 827305-64-6/RN

L11          1 827305-64-6/RN

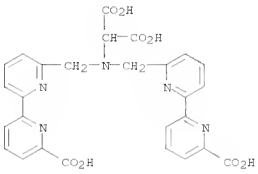
=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L11 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
```

L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 827305-64-6 REGISTRY
CN Propanedioic acid,
2-[bis[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]amino]-,
hydrochloride (1:3) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Propanedioic acid, [bis[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]amino]-,
trihydrochloride (9CI)
MF C27 H21 N5 O8 . 3 Cl H
SR CA
LC STN Files: CA, CAPLUS, CASREACT
DT.CA CAplus document type: Patent
RL.P Roles from patents: PREP (Preparation)
CRN (827572-36-1)



● 3 HCl

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF  FOR DISPLAY COMMAND
SET COMMAND COMPLETED

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=> FIL REGISTRY

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       2.53      37.14

FILE 'REGISTRY' ENTERED AT 09:15:30 ON 14 MAY 2009
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DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

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  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 827599-56-4/RN

L12          1 827599-56-4/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L12 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y
```

L12 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 827599-56-4 REGISTRY

CN Europium, aqua[[6',6'''-[[[(1S)-1-(carboxy-κO)-4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]imino-κN]bis(methylene)]bis[[2,2'-bipyridine]-6-carboxylato-κN1,κN1',κO6]](3-)]- (CA INDEX NAME)

MF C33 H27 Eu N6 O11

CI CCS

SR CA

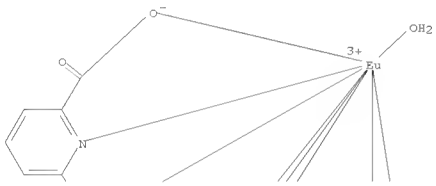
LC STN Files: CA, CAPLUS, CASREACT

DT.CA CAplus document type: Patent

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

RLD.P Roles for non-specific derivatives from patents: PREP (Preparation)

PAGE 1-A



L12 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN (Continued)

PAGE 2-A

PAGE 3-A

O

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> file caplus
COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION
FULL ESTIMATED COST | 3.49 | 40.63

FILE 'CAPLUS' ENTERED AT 09:17:18 ON 14 MAY 2009
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FILE COVERS 1907 - 14 May 2009 VOL 150 ISS 20
FILE LAST UPDATED: 13 May 2009 (20090513/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate

=> S 827305-51-1 or 827305-53-3 or 827305-55-5 or   827305-61-3 or 827305-62-4 or   827305-65-7 or 827305-66-8
   REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L14   1 L13

REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L16 1 L15

REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L18 2 L17

REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L20 2 L19

REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L22 1 L21

REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L24 1 L23

REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L26 1 L25

L27 2 L26 OR L24 OR L22 OR L20 OR L18 OR L16 OR L14

=> d l27 1-2 ibib abs hitind

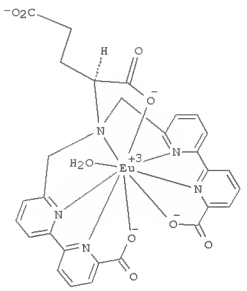
L27 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:26173 CAPLUS
DOCUMENT NUMBER: 146:304100
TITLE: Relationship between the ligand structure and the luminescent properties of water-soluble lanthanide complexes containing bis(bipyridine) anionic arms
AUTHOR(S): Charbonniere, Loic; Weibel, Nicolas; Retailleau, Pascal; Ziessel, Raymond
CORPORATE SOURCE: Lab. Chim. Mol. UMR 7509-CNRS, Ecol Chim. Polymeres Mater., Strasbourg, 67087, Fr.
SOURCE: Chemistry--A European Journal (2006), 13(1), 346-358
CODEN: CEUJED; ISSN: 0947-6539
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:304100
AB Six new ligands (L'-L6) suitable for the formation of luminescent lanthanide complexes in H2O is described. Ligands L1-L4 are constructed from two 6'-carboxy-6-methylene-2,2'-bipyridine chromophoric arms bonded to the amino function of a 2-aminomethylene-6-carboxy-pyridine (L1), an N,N-diacetate-ethylene diamine (L2), a serine (L3), or an aminomalonic acid (L4). For ligands L5 and L6, the linking amino function is provided by a glutamic acid, and the anionic functions at the 6'-position of the bipyridyl arms are made of the Na salts of monoethylphosphonic ester (L5) and phosphonic acid (L6). The synthesis and characterization of the ligands are described, together with the study of the formation of lanthanide complexes with Eu and Tb. In the case of L3, the Eu complex obtained in acidic conditions was crystallized and the x-ray crystal structure
is depicted. Photo-phys. properties of the complexes were studied by UV-visible absorption, and steady-state and time-resolved luminescence spectroscopy. Excited-state luminescence lifetimes of the complexes were determined in H2O and D2O to gain insight into the number of H2O mols. directly
coordinated in the 1st coordination sphere of the complexes. The coordination behavior of ligands is questioned in the light of the spectroscopic data and discussed in terms of protection of the cation towards H2O mols. and their impact on the luminescence efficiency.
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 79
IT 827305-61-3 827572-34-9 928036-50-4 1036724-89-6
1037627-84-1 1037628-11-7 1037628-18-4
RL: PRP (Properties)
(relationship between the ligand structure and the luminescent properties of water-soluble lanthanide complexes containing bis(bipyridine)
anionic arms)
IT 41337-81-9P 49668-99-7P 104086-21-7P 690630-24-1P
827305-62-4P 928036-37-7P 928036-38-8P 928036-40-2P
928036-41-3P 928036-42-4P 928036-43-5P 928036-45-7P 928036-46-8P
928036-48-0P 928036-49-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(relationship between the ligand structure and the luminescent properties of water-soluble lanthanide complexes containing bis(bipyridine)
anionic arms)
REFERENCE COUNT: 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:77721 CAPLUS
DOCUMENT NUMBER: 142:168342
TITLE: Lanthanide bis(carboxybipyridylmethyl)aminoalkanedicarboxylate complexes and analogs, their preparation and their uses as fluorescence markers and NMR relaxation agents
INVENTOR(S): Charbonniere, Loic; Ziessel, Raymond; Wiebel, Nicolas;
Roda, Aldo; Guardigli, Massimo
PATENT ASSIGNEE(S): Centre National de la Recherche Scientifique, Fr.; Universite Louis Pasteur de Strasbourg
SOURCE: Fr. Demande, 50 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2857967	A1	20050128	FR 2003-9158	20030725
CA 2533698	A1	20050217	CA 2004-2533698	20040720
WO 2005014581	A2	20050217	WO 2004-FR1921	20040720
WO 2005014581	A3	20050331		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, CA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1648883	A2	20060426	EP 2004-785982	20040720
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2006529934	T	20061228	JP 2006-521610	20040720
MX 2006000843	A	20060720	MX 2006-843	20060123
US 20080044923	A1	20080221	US 2006-565804	20060125

PRIORITY APPLN. INFO.: FR 2003-9158 A 20030725
WO 2004-FR1921 W 20040720

OTHER SOURCE(S): CASREACT 142:168342; MARPAT 142:168342
GI



I

AB The invention relates to ligands which chelate lanthanides for use as fluorescence markers or as relaxation agents in NMR imaging. Compds. claimed are R1-X-CR2R3-NR4R5 [R1 = functional group; X = bond, hydrocarbon
chain containing at least one alkylene group, heteroatom-containing alkenylene
group, or arylene group; R2 = anionic group (A2) at neutral pH or C1-4 alkylene or alkenylene groups containing at least one A2, which may contain a
heteroatom in the chain; R3 = H, C1-5 alkylene or alkenylene which may contain a heteroatom in the chain and at least one anionic group (A3) at neutral pH; R4 = substituent having light absorption properties and forms three chelate cycles with a lanthanide; R5 = substituent which allows formation of three chelate cycles with a lanthanide]. The group R1 is capable of reacting with functions present in proteins, antibodies, minerals or organic substances. Example lanthanide compds., e.g., I (Na salt), are prepared with bis(carboxybipyridylmethyl)aminoalkanedicarboxylate
ligands.
IC ICM C07D401-14
ICS C07F009-58; C07D213-55; C07D213-79; C07D207-36
CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 9, 27, 73, 79, 80
IT 656258-97-8P 827305-51-1P 827305-53-3P
827305-55-5P 827305-61-3P 827305-62-4P
827305-65-7P 827305-66-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=>  FILE REG

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    23.94      71.43

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -1.64      -1.64

FILE 'REGISTRY' ENTERED AT 09:19:22 ON 14 MAY 2009
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STRUCTURE FILE UPDATES:   13 MAY 2009  HIGHEST RN 1146612-21-6
DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

  Please note that search-term pricing does apply when
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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
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http://www.cas.org/support/stngen/stndoc/properties.html

=> STR 827305-61-3

WARNING.  SINGLE ATOM FRAGMENTS NOT INCLUDED IN MODEL:
Na
:END

L28  STRUCTURE CREATED

=> S L28 EXA SAM

SAMPLE SEARCH INITIATED 09:19:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -        0 TO ITERATE

100.0% PROCESSED        0 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:             0 TO        0
PROJECTED ANSWERS:                0 TO        0

L29           0 SEA EXA SAM L28
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NO ANSWERS WERE FOUND

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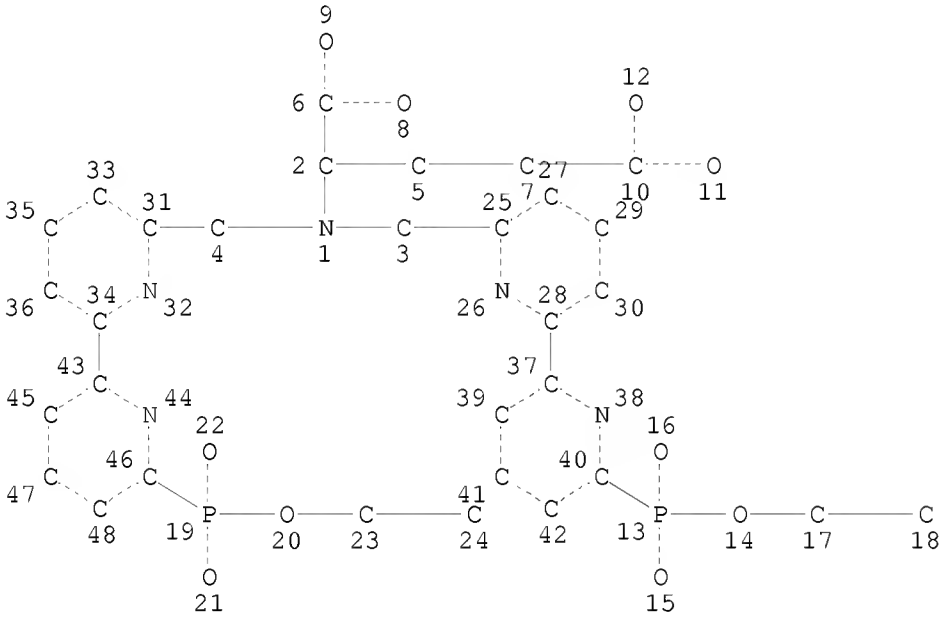
L28 HAS NO ANSWERS
L28 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 48

STEREO ATTRIBUTES: NONE

=> s l28 sss sample
SAMPLE SEARCH INITIATED 09:20:09 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

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L30           0 SEA SSS SAM L28

=> s l28 sss full
FULL SEARCH INITIATED 09:20:18 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -       15 TO ITERATE

100.0% PROCESSED       15 ITERATIONS                                  2 ANSWERS
SEARCH TIME: 00.00.01

L31           2 SEA SSS FUL L28

=> d his

     (FILE 'HOME' ENTERED AT 09:04:49 ON 14 MAY 2009)

     FILE 'CAPLUS' ENTERED AT 09:05:01 ON 14 MAY 2009
                E US2006-565804/AP
L1            4 S E3

     FILE 'REGISTRY' ENTERED AT 09:09:56 ON 14 MAY 2009
L2            1 S 827601-09-2/RN
                SET NOTICE 1 DISPLAY
                SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:10:36 ON 14 MAY 2009
L3            1 S 827601-10-5/RN
                SET NOTICE 1 DISPLAY
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     FILE 'REGISTRY' ENTERED AT 09:10:54 ON 14 MAY 2009
L4            1 S 827305-59-9/RN
                SET NOTICE 1 DISPLAY
                SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:11:43 ON 14 MAY 2009
L5            1 S 827305-63-5/RN
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                SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:12:07 ON 14 MAY 2009
L6            1 S 656258-97-8/RN
                SET NOTICE 1 DISPLAY
                SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:12:33 ON 14 MAY 2009
L7            1 S 827305-66-8/RN
                SET NOTICE 1 DISPLAY
                SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:13:01 ON 14 MAY 2009
L8            1 S 827305-65-7/RN
                SET NOTICE 1 DISPLAY
                SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:13:40 ON 14 MAY 2009
L9            1 S 827305-62-4/RN
                SET NOTICE 1 DISPLAY
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                SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:14:18 ON 14 MAY 2009
L10             1 S 827305-61-3/RN
                SET NOTICE 1 DISPLAY
                SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:14:48 ON 14 MAY 2009
L11             1 S 827305-64-6/RN
                SET NOTICE 1 DISPLAY
                SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:15:30 ON 14 MAY 2009
L12             1 S 827599-56-4/RN
                SET NOTICE 1 DISPLAY
                SET NOTICE LOGIN DISPLAY

     FILE 'CAPLUS' ENTERED AT 09:17:18 ON 14 MAY 2009
                S 827305-51-1/REG# OR   827305-53-3/REG#  OR   827305-55-5/REG#

     FILE 'REGISTRY' ENTERED AT 09:17:24 ON 14 MAY 2009
L13             1 S 827305-66-8/RN

     FILE 'CAPLUS' ENTERED AT 09:17:25 ON 14 MAY 2009
L14             1 S L13

     FILE 'REGISTRY' ENTERED AT 09:17:25 ON 14 MAY 2009
L15             1 S 827305-65-7/RN

     FILE 'CAPLUS' ENTERED AT 09:17:25 ON 14 MAY 2009
L16             1 S L15

     FILE 'REGISTRY' ENTERED AT 09:17:26 ON 14 MAY 2009
L17             1 S 827305-62-4/RN

     FILE 'CAPLUS' ENTERED AT 09:17:27 ON 14 MAY 2009
L18             2 S L17

     FILE 'REGISTRY' ENTERED AT 09:17:28 ON 14 MAY 2009
L19             1 S 827305-61-3/RN

     FILE 'CAPLUS' ENTERED AT 09:17:28 ON 14 MAY 2009
L20             2 S L19

     FILE 'REGISTRY' ENTERED AT 09:17:28 ON 14 MAY 2009
L21             1 S 827305-55-5/RN

     FILE 'CAPLUS' ENTERED AT 09:17:29 ON 14 MAY 2009
L22             1 S L21

     FILE 'REGISTRY' ENTERED AT 09:17:30 ON 14 MAY 2009
L23             1 S 827305-53-3/RN

     FILE 'CAPLUS' ENTERED AT 09:17:30 ON 14 MAY 2009
L24             1 S L23

     FILE 'REGISTRY' ENTERED AT 09:17:31 ON 14 MAY 2009
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L25             1 S 827305-51-1/RN

     FILE 'CAPLUS' ENTERED AT 09:17:31 ON 14 MAY 2009
L26             1 S L25
L27             2 S L26 OR L24 OR L22 OR L20 OR L18 OR L16 OR L14

     FILE 'REGISTRY' ENTERED AT 09:19:22 ON 14 MAY 2009
L28               STR 827305-61-3
L29             0 S L28 EXA SAM
L30             0 S L28 SSS SAMPLE
L31             2 S L28 SSS FULL

=> s l31 not l27
L32           1 L31 NOT L27

=> d ibib abs hitstr
'IBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual
fields or predefined formats.  The predefined substance formats
are:  (RN = CAS Registry Number)

REG    - RN
SAM    - Index Name, MF, and structure - no RN
FIDE   - All substance data, except sequence data
IDE    - FIDE, but only 50 names
SQIDE  - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD    - Protein sequence data, includes RN
SQD3   - Same as SQD, but 3-letter amino acid codes are used
SQN    - Protein sequence name information, includes RN

EPROP  - Table of experimental properties
PPROP  - Table of predicted properties
PROP   - EPROP, ETAG, PPROP and SPEC

Any CA File format may be combined with any substance format to
obtain CA references citing the substance.  The substance formats
must be cited first.  The CA File predefined formats are:

ABS  -- Abstract
APPS -- Application and Priority Information
BIB  -- CA Accession Number, plus Bibliographic Data
CAN  -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND  -- Index Data
IPC  -- International Patent Classification
PATS -- PI, SO
STD  -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented
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OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.
The MAX format is the same as ALL.
The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):end

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	186.84	258.27

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.64

FILE 'CAPLUS' ENTERED AT 09:21:04 ON 14 MAY 2009
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FILE COVERS 1907 - 14 May 2009 VOL 150 ISS 20
FILE LAST UPDATED: 13 May 2009 (20090513/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate

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=> s l32
L33           1 L32

=> s l32 not l27
              1 L32
L34           0 L32 NOT L27

=>  FILE REG

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     1.00     259.27

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -1.64

FILE 'REGISTRY' ENTERED AT 09:21:58 ON 14 MAY 2009
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STRUCTURE FILE UPDATES:   13 MAY 2009  HIGHEST RN 1146612-21-6
DICTIONARY FILE UPDATES:  13 MAY 2009  HIGHEST RN 1146612-21-6

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> STR 827305-62-4

:END

L35  STRUCTURE CREATED

=> S L35 EXA SAM

SAMPLE SEARCH INITIATED 09:22:02 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -        0 TO ITERATE

100.0% PROCESSED        0 ITERATIONS                              0 ANSWERS
SEARCH TIME: 00.00.02
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FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS: 0 TO   0
PROJECTED ANSWERS: 0 TO   0

L36   0 SEA EXA SAM L35

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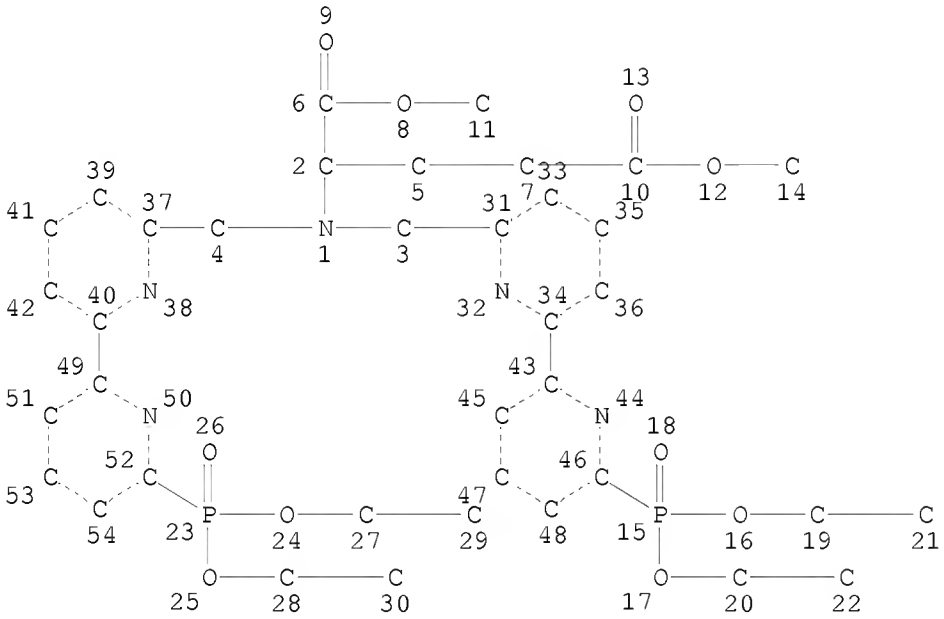
L35 HAS NO ANSWERS
L35   STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 54

STEREO ATTRIBUTES: NONE

=> s l35 sss sample
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SAMPLE SCREEN SEARCH COMPLETED -   3 TO ITERATE

100.0% PROCESSED   3 ITERATIONS   0 ANSWERS

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SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:             3 TO      163
PROJECTED ANSWERS:                0 TO        0

L37           0 SEA SSS SAM L35

=> s l35 sss full
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FULL SCREEN SEARCH COMPLETED -      137 TO ITERATE

100.0% PROCESSED      137 ITERATIONS                                1 ANSWERS
SEARCH TIME: 00.00.01

L38           1 SEA SSS FUL L35

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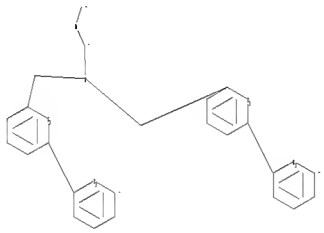

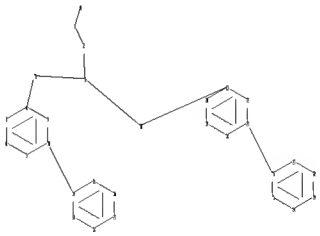

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chain nodes :
1  2  3  4  11  30
ring nodes :
5  6  7  8  9  10  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27
28  29
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chain bonds :
1-2  1-11  1-30  2-3  3-4  8-11  10-14  21-30  23-26
ring bonds :
5-6  5-10  6-7  7-8  8-9  9-10  12-13  12-17  13-14  14-15  15-16  16-17  18-19
18-23  19-20  20-21  21-22  22-23  24-25  24-29  25-26  26-27  27-28  28-29
exact/norm bonds :
1-2  1-11  1-30  2-3  3-4  5-6  5-10  6-7  7-8  8-9  8-11  9-10  10-14  12-13
12-17  13-14  14-15  15-16  16-17  18-19  18-23  19-20  20-21  21-22  21-30  22-23
23-26  24-25  24-29  25-26  26-27  27-28  28-29


G1:O,N

Match level :
1:CLASS  2:CLASS  3:CLASS  4:CLASS  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
 11:CLASS  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:Atom  19:Atom
20:Atom  21:Atom  22:Atom  23:Atom  24:Atom  25:Atom  26:Atom  27:Atom  28:Atom
29:Atom  30:CLASS



L39     STRUCTURE UPLOADED

=> d
L39 HAS NO ANSWERS
L39             STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> s l39 sss sample
SAMPLE SEARCH INITIATED 09:34:02 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      111 TO ITERATE

100.0% PROCESSED      111 ITERATIONS                                  0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         1588 TO     2852
PROJECTED ANSWERS:               0 TO        0

L40           0 SEA SSS SAM L39

=> s l39 sss full
FULL SEARCH INITIATED 09:34:10 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     2207 TO ITERATE

100.0% PROCESSED     2207 ITERATIONS                                  0 ANSWERS
SEARCH TIME: 00.00.01

L41           0 SEA SSS FUL L39

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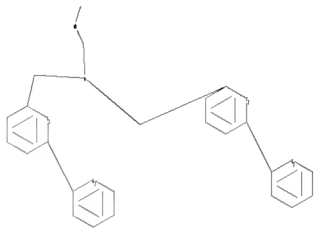

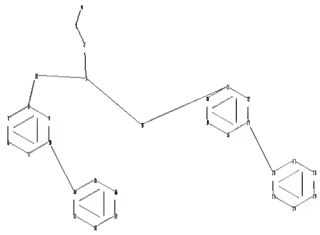

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ring nodes :
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ring bonds :
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exact/norm bonds :
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G1:O,N

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:CLASS

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L42     STRUCTURE UPLOADED

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SAMPLE SEARCH INITIATED 09:35:48 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      111 TO ITERATE

100.0% PROCESSED      111 ITERATIONS                                 2 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
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PROJECTED ANSWERS:               2 TO      124

L43           2 SEA SSS SAM L42

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SEARCH TIME: 00.00.01

L44          39 SEA SSS FUL L42

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FILE COVERS 1907 - 14 May 2009  VOL 150 ISS 20
FILE LAST UPDATED: 13 May 2009  (20090513/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Feb 2009
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USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

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This file contains CAS Registry Numbers for easy and accurate

=> s l44
L45 10 L44

=> d 1-10 ibib abs hitstr

L45 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN

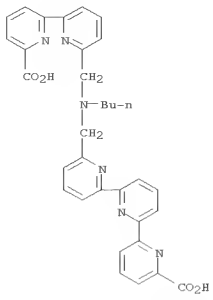
ACCESSION NUMBER: 2008:430001 CAPLUS
DOCUMENT NUMBER: 149:20153
TITLE: Tuning the Coordination Sphere around Highly Luminescent Lanthanide Complexes
AUTHOR(S): Charbonniere, Loic; Mameri, Samir; Kadjane, Pascal; Platas-Iglesias, Carlos; Ziessel, Raymond
CORPORATE SOURCE: Laboratoire de Chimie Moleculaire associe au CNRS, ECPM-ULP, Strasbourg, 67087, Fr.
SOURCE: Inorganic Chemistry (Washington, DC, United States) (2008), 47(9), 3748-3762
CODEN: INOCAJ; ISSN: 0020-1669
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Three ligands designed for the formation of water-soluble luminescent lanthanide complexes is described. All ligands are based on a 6''-carboxy-2,2':6',2''-terpyridine framework linked via a methylene bridge to n-butylamine. The 2nd neg. charged arm consists of a 6-carboxy-2-methylenepyridine for L1, a 6'-carboxy-6-methylene-2,2'-bipyridine for L2, and a 6''-carboxy-6-methylene-2,2':6',2''-terpyridine for L3. The photophys. properties of the Eu and Tb complexes were studied in aqueous solns. by absorption spectroscopy and steady-state and time-resolved luminescence spectroscopy. Luminescence excited-state lifetimes were recorded and led to the determination of two H2O mols. in the 1st coordination sphere. The Eu complexes were characterized by 1H NMR spectroscopy in D2O and DFT calcns. performed at the B3LYP level both in vacuo and in aqueous solution Finally, the influence of different phosphorylated anions such as HPO42-, ATP4-, ADP3-, and AMP2- on the luminescence properties of the [EuLX(H2O)2]+ complexes (X = 1-3) was studied in buffered aqueous solns. (0.01M TRIS, pH 7.0), showing a significant interaction of ATP4- with [Eu(L2)(H2O)2]+. The coordination of anions was understood in terms of partial decomplexation of one arm of the ligands and H2O displacement, with formation of ternary species, and it was rationalized from the structural models of the complexes obtained from DFT calcns.

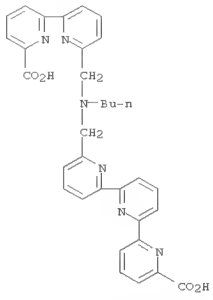
IT 1004309-89-0 1004309-89-0D, europium complex
1004309-93-6 1004309-93-6D, europium complex
RL: PRP (Properties)
(tuning the coordination sphere around highly luminescent lanthanide complexes)

RN 1004309-89-0 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-carboxylic acid, 6''-[[butyl[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]amino]methyl]- (CA INDEX NAME)

L45 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

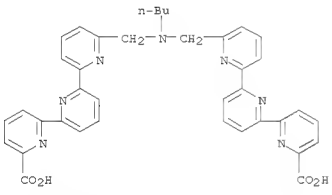


RN 1004309-89-0 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-carboxylic acid, 6''-[[butyl[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]amino]methyl]- (CA INDEX NAME)

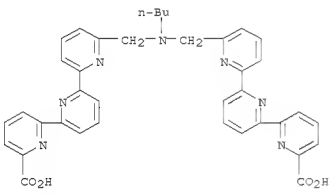


RN 1004309-93-6 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-carboxylic acid, 6'',6'''''-[(butylimino)bis(methylene)]bis- (CA INDEX NAME)

L45 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



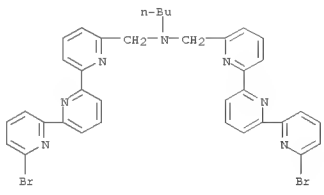
RN 1004309-93-6 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-carboxylic acid, 6'',6'''''-[(butylimino)bis(methylene)]bis- (CA INDEX NAME)



IT 1004309-81-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(tuning the coordination sphere around highly luminescent lanthanide complexes)

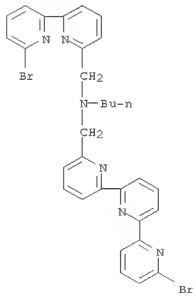
RN 1004309-81-2 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-methanamine, 6''-bromo-N-[(6''-bromo[2,2':6',2''-terpyridin]-6-yl)methyl]-N-butyl- (CA INDEX NAME)

L45 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



IT 1004309-79-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(tuning the coordination sphere around highly luminescent lanthanide complexes)

RN 1004309-79-8 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-methanamine, 6''-bromo-N-[(6'-bromo[2,2'-bipyridin]-6-yl)methyl]-N-butyl- (CA INDEX NAME)



REFERENCE COUNT: 126 THERE ARE 126 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

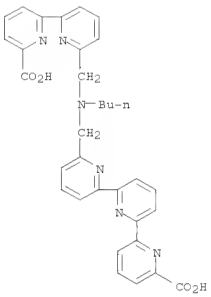
L45 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1384080 CAPLUS
DOCUMENT NUMBER: 148:204507
TITLE: Efficient route to hybrid polypyridine-carboxylate ligands for lanthanide complexation
AUTHOR(S): Mameri, Samir; Charbonniere, Loic; Ziessel, Raymond
CORPORATE SOURCE: Laboratoire de Chimie Moleculaire, Associe au CNRS, Ecole de Chimie, Polymeres, Materiaux (ECPM), Universite Louis Pasteur (ULP), Strasbourg, 67087, Fr.
SOURCE: Tetrahedron Letters (2007), 48(52), 9132-9136
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 148:204507

AB An efficient methodol. for the preparation of aminobutyl-bromo-terpyridine is described using a preformed imine prepared from a gem-dibromomethylterpyridine derivative and the primary amine and further reduced to the secondary amine. Alkylation with pyridine, bipyridine, or terpyridine residues in the presence of a mineral base provides highly functionalized asym. and sym. N-heterocyclic ligands. All bromo-containing products were subjected to a carboalkoxylation/hydrolysis sequence of reactions, providing the desired carboxylic acids. Stable Eu complexes were prepared under neutral aqueous conditions and some of them display interesting spectroscopic properties (luminescence).

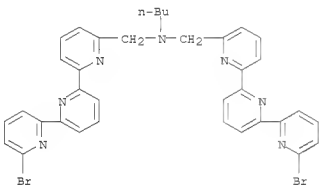
IT 1004309-89-0P 1004309-93-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and complexation with europium)

RN 1004309-89-0 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-carboxylic acid, 6''-[[butyl[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]amino]methyl]- (CA INDEX NAME)

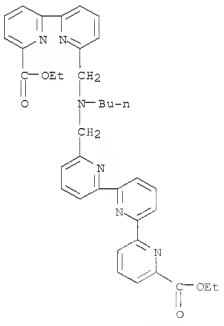


L45 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

INDEX NAME)



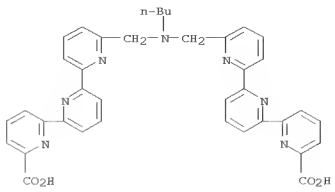
RN 1004309-87-8 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-carboxylic acid, 6''-[[butyl[(6'-(ethoxycarbonyl)[2,2'-bipyridin]-6-yl]methyl]amino]methyl]-, ethyl ester (CA INDEX NAME)



RN 1004309-91-4 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-carboxylic acid, 6'',6'''''-[(butylimino)bis(methylene)]bis-, 6,6'''-diethyl ester (CA INDEX NAME)

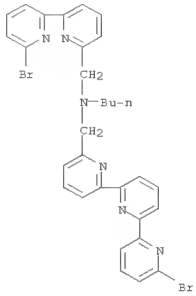
L45 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

RN 1004309-93-6 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-carboxylic acid, 6'',6'''''-[(butylimino)bis(methylene)]bis- (CA INDEX NAME)



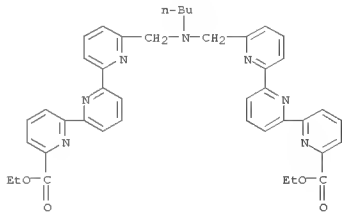
IT 1004309-79-8P 1004309-81-2P 1004309-87-8P 1004309-91-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and conversion to acid)

RN 1004309-79-8 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-methanamine, 6''-bromo-N-[(6'-bromo[2,2'-bipyridin]-6-yl)methyl]-N-butyl- (CA INDEX NAME)



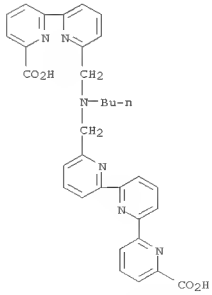
RN 1004309-81-2 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-methanamine, 6''-bromo-N-[(6''-bromo[2,2':6',2''-terpyridin]-6-yl)methyl]-N-butyl- (CA

L45 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



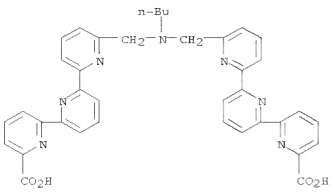
IT 1004309-89-0DP, europium complex 1004309-93-6DP, europium complex
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 1004309-89-0 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-carboxylic acid, 6''-[[butyl[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]amino]methyl]- (CA INDEX NAME)



RN 1004309-93-6 CAPLUS
CN [2,2':6',2''-Terpyridine]-6-carboxylic acid, 6'',6'''''-[(butylimino)bis(methylene)]bis- (CA INDEX NAME)

L45 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



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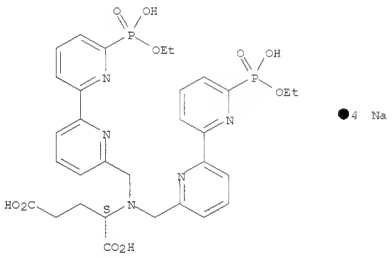
L45 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:26173 CAPLUS
DOCUMENT NUMBER: 146:304100
TITLE: Relationship between the ligand structure and the luminescent properties of water-soluble lanthanide complexes containing bis(bipyridine) anionic arms
AUTHOR(S): Charbonniere, Loiec; Weibel, Nicolas; Retailleau, Pascal; Ziessel, Raymond
CORPORATE SOURCE: Lab. Chim. Mol. UMR 7509-CNRS, Ecol Chim. Polymeres Mater., Strasbourg, 67087, Fr.
SOURCE: Chemistry--A European Journal (2006), 13(1), 346-358
CODEN: CEUJED; ISSN: 0947-6539
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:304100
AB Six new ligands (L'-L6) suitable for the formation of luminescent lanthanide complexes in H2O is described. Ligands L1-L4 are constructed from two 6'-carboxy-6-methylene-2,2'-bipyridine chromophoric arms bonded to the amino function of a 2-aminomethylene-6-carboxy-pyridine (L1), an N,N-diacetate-ethylene diamine (L2), a serine (L3), or an aminomalonic acid (L4). For ligands L5 and L6, the linking amino function is provided by a glutamic acid, and the anionic functions at the 6'-position of the bipyridyl arms are made of the Na salts of monoethylphosphonic ester (L5) and phosphonic acid (L6). The synthesis and characterization of the ligands are described, together with the study of the formation of lanthanide complexes with Eu and Tb. In the case of L3, the Eu complex obtained in acidic conditions was crystallized and the x-ray crystal structure
is depicted. Photo-phys. properties of the complexes were studied by UV-visible absorption, and steady-state and time-resolved luminescence spectroscopy. Excited-state luminescence lifetimes of the complexes were determined in H2O and D2O to gain insight into the number of H2O mols. directly
coordinated in the 1st coordination sphere of the complexes. The coordination behavior of ligands is questioned in the light of the spectroscopic data and discussed in terms of protection of the cation towards H2O mols. and their impact on the luminescence efficiency.
IT 827305-61-3 827572-34-9 928036-50-4
RL: PRP (Properties)
(relationship between the ligand structure and the luminescent properties of water-soluble lanthanide complexes containing bis(bipyridine)
anionic arms)
RN 827305-61-3 CAPLUS
CN L-Glutamic acid, N,N-bis[[6'-(ethoxyhydroxyphosphinyl)[2,2'-bipyridin]-6-yl]methyl]-, sodium salt (1:4) (CA INDEX NAME)

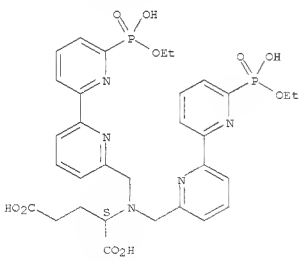
Absolute stereochemistry.

L45 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



RN 827572-34-9 CAPLUS
CN L-Glutamic acid, N,N-bis[[6'-(ethoxyhydroxyphosphinyl)[2,2'-bipyridin]-6-yl]methyl]- (CA INDEX NAME)

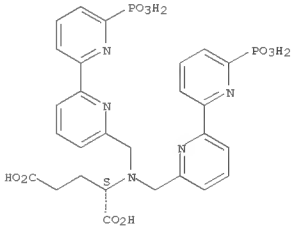
Absolute stereochemistry.

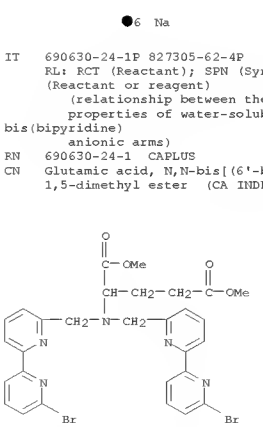


RN 928036-50-4 CAPLUS
CN L-Glutamic acid, N,N-bis[(6'-phosphono[2,2'-bipyridin]-6-yl)methyl]-, sodium salt (1:6) (CA INDEX NAME)

Absolute stereochemistry.

L45 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



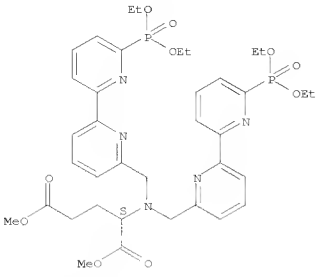


IT 690630-24-1P 827305-62-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(relationship between the ligand structure and the luminescent properties of water-soluble lanthanide complexes containing bis(bipyridine)
anionic arms)
RN 690630-24-1 CAPLUS
CN Glutamic acid, N,N-bis[(6'-bromo[2,2'-bipyridin]-6-yl)methyl]-, 1,5-dimethyl ester (CA INDEX NAME)

RN 827305-62-4 CAPLUS
CN L-Glutamic acid, N,N-bis[[6'-(diethoxyphosphinyl)[2,2'-bipyridin]-6-yl]methyl]-, 1,5-dimethyl ester (CA INDEX NAME)

Absolute stereochemistry.

L45 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



REFERENCE COUNT: 65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS
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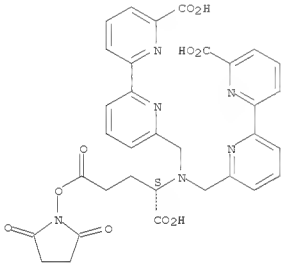
L45 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



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RECORD. ALL CITATIONS AVAILABLE IN THE RE
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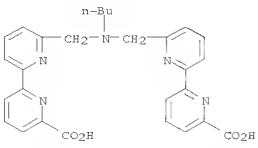
L45 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:1038183 CAPLUS
DOCUMENT NUMBER: 144:103211
TITLE: Luminescence probes for sensitive and specific optical
imaging
AUTHOR(S): Roda, A.; Guardigli, M.; Pasini, P.; Mirasoli, M.; Michelini, E.; Charbonniere, L.; Ziessel, R.
CORPORATE SOURCE: Dept of Pharmaceutical Sciences, University of Bologna, Bologna, 40126, Italy
SOURCE: Bioluminescence & Chemiluminescence: Progress and Perspectives, [International Symposium on Bioluminescence & Chemiluminescence], 13th, Yokohama, Japan, Aug. 2-6, 2004 (2005), Meeting Date 2004, 261-264. Editor(s): Tsuji, Akio. World Scientific Publishing Co. Pte. Ltd.: Singapore, Singapore. CODEN: 69HIQA; ISBN: 981-256-118-8
DOCUMENT TYPE: Conference
LANGUAGE: English
AB A new lanthanide chelating ligand able to form stable and luminescent Eu3+
and Tb3+ complexes and suitable for binding to primary amino groups of biomols. was synthesized. The new ligand is based on a tridentate metal-coordinating and luminescence-sensitizing unit, which takes advantage of both the light absorption and energy transfer ability of the 2,2,-bipyridine chromophore and the coordinating ability of the carboxylate anion. The lanthanide complexes of the new ligand, particularly the Tb3+ one, are suitable for application as luminescent labels in time-resolved fluorescence (TRF) microscope imaging techniques, and that they could allow to achieve limits of detection similar to those obtained with chemiluminescence (CL) enzyme-labeled probes. A conjugate of the Tb3+ chelate along with an anti-digoxigenin antibody were then tested for the detection of human papillomavirus nucleic acids in cells and tissue sections, and compared with CL detection. The comparison of the results obtained in serial tissue sections with the different detection techniques suggested that the two labels antibodies exhibit the same detectability.
IT 873099-32-2D, metal ligand
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST
(Analytical study); BIOL (Biological study); USES (Uses)
(luminescence probes for sensitive and specific optical imaging)
RN 873099-32-2 CAPLUS
CN [2,2'-Bipyridine]-6-carboxylic acid, 6',6'''-[[[(1S)-1-carboxy-4-[(2,5-dioxo-1-pyrrolidinyl)oxy]-4-oxobutyl]imino]bis(methylene)]bis- (9CI) (CA INDEX NAME)

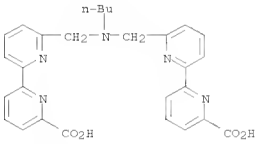
Absolute stereochemistry.

L45 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:973851 CAPLUS
DOCUMENT NUMBER: 143:415111
TITLE: Photophysical and Structural Impact of Phosphorylated Anions Associated to Lanthanide Complexes in Water
AUTHOR(S): Charbonniere, Loiec J.; Schurhammer, Rachel; Mameri, Samir; Wipff, Georges; Ziessel, Raymond F.
CORPORATE SOURCE: Laboratoire de Chimie Moleculaire, UMR CNRS 7509, ECPM-ULP, Strasbourg, 67087, Fr.
SOURCE: Inorganic Chemistry (2005), 44(20), 7151-7160 CODEN: INOCAJ; ISSN: 0020-1669
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 143:415111
AB A new ligand, LC, bis[(6'-carboxy-2,2'-bipyridine-6-yl)]phenylphosphine oxide, in which the tridentate 6'-carboxy-2,2'-bipyridyl arms are directly
linked to a phenylphosphine oxide fragment, was synthesized. The corresponding [Ln·LC]Cl·xH2O complexes (Ln = Eu, x = 4, and Tb, x = 3) were isolated from solns. containing equimolar amts. of LC and hydrated LnCl3 salts and characterized by elemental anal., mass spectrometry, and IR spectroscopy. The interactions of the Eu complex with various anions (AMP2-, ADP3-, ATP,4- HPO42-, and NO3-) were studied by titration expts., using UV-visible, luminescence spectroscopy, and excited-state lifetime measurements. The results are in keeping with strong interactions with the ADP3-, ATP4-, and phosphate anions in TRIS/HCl buffer (0.01 M, pH = 7.0), as revealed by the determination of the
conditional stepwise association consts. These values are higher than the one
determined for ligand LB, bis[6'-carboxy-2,2'-bipyridyl-6-methyl](n-butyl)amine
(Δ log K ≈ 1-2). The interaction of [Ln·LB]+ and [Ln·LC]+ with nitrate, monohydrogenophosphate, Me phosphate (MeP2-), Me diphosphate (MeDP3-), and Me triphosphate (MeTP4-) anions was studied by quantum mech. (QM) calcns. The results, combined with data on the photophys. impact of the sequential competitive binding of anions to the Eu complexes in H2O, suggest that LB is too flexible to ensure a good coordination pocket, while the mol. structure of ligand LC stabilizes both
the formation of the lanthanide complexes and its adducts with ATP.
IT 656259-03-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(complexation with lanthanide(III) in water with nitrate or phosphorylated anions)
RN 656259-03-9 CAPLUS
CN [2,2'-Bipyridine]-6-carboxylic acid, 6'-[[butyl[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]amino]methyl]- (CA INDEX NAME)

L45 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



IT 656259-03-9D, Lanthanide(III) complexes in water with nitrate or phosphorylated anions
RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)
(formation, stability consts., photophys. properties, and calculated optimized mol. structures)
RN 656259-03-9 CAPLUS
CN [2,2'-Bipyridine]-6-carboxylic acid, 6'-[[butyl[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]amino]methyl]- (CA INDEX NAME)



REFERENCE COUNT: 81 THERE ARE 81 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN

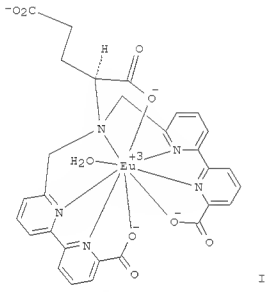
ACCESSION NUMBER: 2005:77721 CAPLUS
DOCUMENT NUMBER: 142:168342
TITLE: Lanthanide bis(carboxybipyridylmethyl)aminoalkanedicarboxylate complexes and analogs, their preparation and their uses as fluorescence markers and NMR relaxation agents
INVENTOR(S): Charbonniere, Loic; Ziessel, Raymond; Wiebel, Nicolas; Roda, Aldo; Guardigli, Massimo
PATENT ASSIGNEE(S): Centre National de la Recherche Scientifique, Fr.; Universite Louis Pasteur de Strasbourg
SOURCE: Fr. Demande, 50 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2857967	A1	20050128	FR 2003-9158	20030725
CA 2533698	A1	20050217	CA 2004-2533698	20040720
WO 2005014581	A2	20050217	WO 2004-FR1921	20040720
WO 2005014581	A3	20050331		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1648883	A2	20060426	EP 2004-785982	20040720
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
JP 2006528934	T	20061228	JP 2006-521610	20040720
MX 2006000843	A	20060720	MX 2006-843	20060123
US 20080044923	A1	20080221	US 2006-565804	20060125

PRIORITY APPLN. INFO.: FR 2003-9158 A 20030725
WO 2004-FR1921 W 20040720

OTHER SOURCE(S): CASREACT 142:168342; MARPAT 142:168342
GI

L45 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

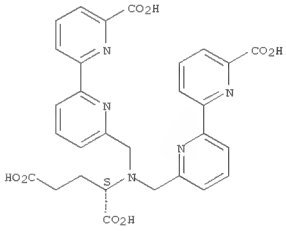


I

AB The invention relates to ligands which chelate lanthanides for use as fluorescence markers or as relaxation agents in NMR imaging. Compds. claimed are R1-X-CR2R3-NR4R5 [R1 = functional group; X = bond, hydrocarbon chain containing at least one alkylene group, heteroatom-containing alkenylene group, or arylene group; R2 = anionic group (A2) at neutral pH or C1-4 alkylene or alkenylene groups containing at least one A2, which may contain a heteroatom in the chain; R3 = H, C1-5 alkylene or alkenylene which may contain a heteroatom in the chain and at least one anionic group (A3) at neutral pH; R4 = substituent having light absorption properties and forms three chelate cycles with a lanthanide; R5 = substituent which allows formation of three chelate cycles with a lanthanide]. The group R1 is capable of reacting with functions present in proteins, antibodies, minerals or organic substances. Example lanthanide compds., e.g., I (Na salt), are prepared with bis(carboxybipyridylmethyl)aminoalkanedicarboxylate ligands.
IT 827305-51-1P 827305-53-3P 827305-55-5P 827305-61-3P 827305-62-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)
RN 827305-51-1 CAPLUS
CN L-Glutamic acid, N,N-bis[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]-, trihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

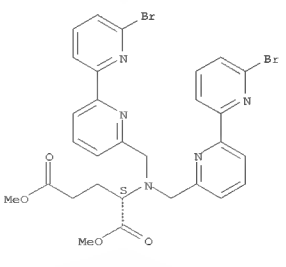
L45 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



●3 HCl

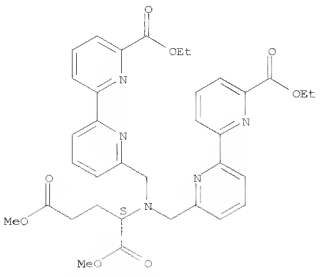
RN 827305-53-3 CAPLUS
CN L-Glutamic acid, N,N-bis[(6'-bromo[2,2'-bipyridin]-6-yl)methyl]-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



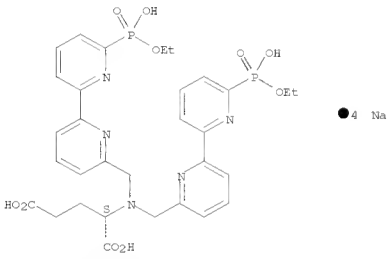
RN 827305-55-5 CAPLUS
CN L-Glutamic acid, N,N-bis[[6'-(ethoxycarbonyl)[2,2'-bipyridin]-6-yl]methyl]-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



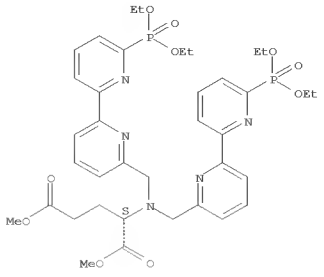
RN 827305-61-3 CAPLUS
CN L-Glutamic acid, N,N-bis[[6'-(ethoxyhydroxyphosphinyl)[2,2'-bipyridin]-6-yl]methyl]-, sodium salt (1:4) (CA INDEX NAME)

Absolute stereochemistry.



RN 827305-62-4 CAPLUS
CN L-Glutamic acid, N,N-bis[[6'-(diethoxyphosphinyl)[2,2'-bipyridin]-6-yl]methyl]-, 1,5-dimethyl ester (CA INDEX NAME)

Absolute stereochemistry.

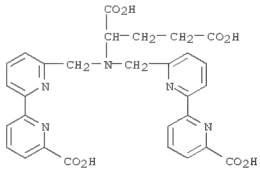


REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

ACCESSION NUMBER: 2004:244948 CAPLUS
DOCUMENT NUMBER: 140:420226
TITLE: Engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging
AUTHOR(S): Weibel, Nicolas; Charbonniere, Loiec J.; Guardigli, Massimo; Roda, Aldo; Ziessel, Raymond
CORPORATE SOURCE: Laboratoire de Chimie Moleculaire, Ecole de Chimie Polymeres et Materiaux/ULP, Strasbourg, 67087, Fr.
SOURCE: Journal of the American Chemical Society (2004), 126(15), 4888-4896
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

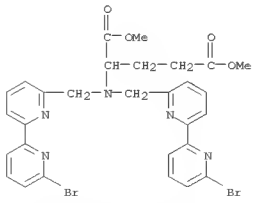
AB The synthesis of a new ligand LH4 based on a glutamic acid skeleton bis-functionalized on its nitrogen atom by 6-methylene-6'-carboxy-2,2'-bipyridine chromophoric units is described. UV-vis spectrophotometric titrns. revealed the formation of 1:1 M:L complexes with lanthanide(III) cations, and complexation of LH4 with equimolar amts. of hydrated LnCl3 salts (Ln = Eu, Gd, and Tb) gave water-soluble and stable complexes of the general formula [LnL(H2O)]Na, which were characterized by elemental anal., IR, UV-vis absorption spectroscopy, 1H NMR (Ln = Eu), and mass spectrometry. The conditional stability constant for formation of the [EuL(H2O)]Na complex was determined by competitive complexation expts. to be log K = 16.5±0.6 in 0.01 M TRIS/HCl buffer (pH = 7.0). In water solution, the [EuL(H2O)]Na and [TbL(H2O)]Na complexes were highly luminescent with quantum yields of 8% and 31%, resp., despite the presence of .apprx.. One water mol. in the first coordination sphere of the metal ions. Activation of the appended carboxylate function of the glutamate moiety in the form of an N-hydroxysuccinimidyl ester allows for the covalent linking of the complexes to primary amino groups of biol. compds. Bovine serum albumin (BSA) was labeled with both Eu or Tb complexes, and the Ln-BSA conjugates were characterized by UV-vis absorption and emission spectroscopy and MALDI-TOF mass spectrometry. Labeling ratios (number of complex mols. per BSA) of .apprx.8:1 and 7:1 were established for Eu-BSA and Tb-BSA, resp. The suitability of the tagged compound for use in bioanal. time-resolved luminescence microscopy was established by comparison with fluorescein-labeled probes.

IT 690630-26-3P
RL: ARU (Analytical role, unclassified); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant or reagent)
(engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging)
RN 690630-26-3 CAPLUS
CN Glutamic acid, N,N-bis[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]-, trihydrochloride (9CI) (CA INDEX NAME)



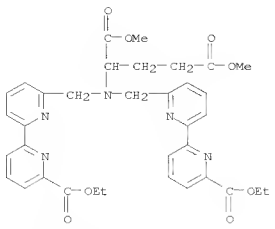
●3 HCl

IT 690630-24-1P 690630-25-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(engineering of highly luminescent lanthanide tags suitable for protein labeling and time-resolved luminescence imaging)
RN 690630-24-1 CAPLUS
CN Glutamic acid, N,N-bis[(6'-bromo[2,2'-bipyridin]-6-yl)methyl]-, 1,5-dimethyl ester (CA INDEX NAME)



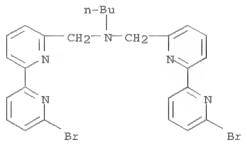
RN 690630-25-2 CAPLUS
CN Glutamic acid, N,N-bis[[6'-(ethoxycarbonyl)[2,2'-bipyridin]-6-yl]methyl]-, dimethyl ester (9CI) (CA INDEX NAME)

L45 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



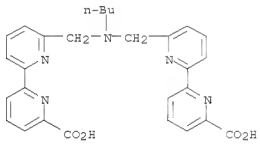
REFERENCE COUNT: 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L45 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:125070 CAPLUS
DOCUMENT NUMBER: 140:382549
TITLE: Lanthanide/ATP Interaction in Water Mediated by Luminescent Hemispherical-Shaped Complexes
AUTHOR(S): Mameri, Samir; Charbonniere, Loiec J.; Ziessel, Raymond F.
CORPORATE SOURCE: LCM, ECPM, Strasbourg, 67087, Fr.
SOURCE: Inorganic Chemistry (2004), 43(6), 1819-1821
CODEN: INOCAJ; ISSN: 0020-1669
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Ligand LH2, composed of two bipyridylcarboxylate fragments linked to an amino Bu chain, reacts with Eu and Tb to form luminescent complexes in H2O at neutral pH. When testing these unsatd. complexes as anion sensors with NO3-, HPO42-, AMP, ADP, and ATP, a marked selectivity is observed for HPO42- and ATP4- at pH = 7.0. The interaction of these anions with the complex was studied by absorption and emission spectroscopies. With ATP4-, ES-MS and 31P NMR expts. revealed the formation of a [Ln·L·(ATP)]3- ternary species.
IT 656258-99-0DP, metal complex
RL: PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation) (lanthanide/ATP interaction in water mediated by luminescent hemispherical-shaped complexes)
RN 656258-99-0 CAPLUS
CN [2,2'-Bipyridine]-6-methanamine, 6'-bromo-N-[(6'-bromo[2,2'-bipyridin]-6-yl)methyl]-N-butyl- (CA INDEX NAME)

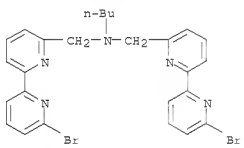


IT 656259-03-9P
RL: PNU (Preparation, unclassified); PRP (Properties); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(lanthanide/ATP interaction in water mediated by luminescent hemispherical-shaped complexes)
RN 656259-03-9 CAPLUS
CN [2,2'-Bipyridine]-6-carboxylic acid, 6'-[[butyl[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]amino]methyl]- (CA INDEX NAME)

L45 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

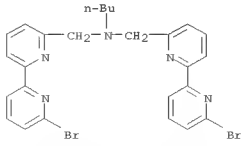


IT 656258-99-0P
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(lanthanide/ATP interaction in water mediated by luminescent hemispherical-shaped complexes)
RN 656258-99-0 CAPLUS
CN [2,2'-Bipyridine]-6-methanamine, 6'-bromo-N-[(6'-bromo[2,2'-bipyridin]-6-yl)methyl]-N-butyl- (CA INDEX NAME)

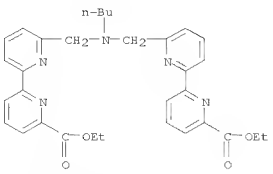


REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

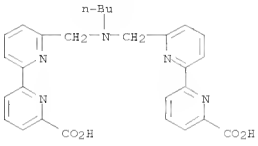
L45 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:989166 CAPLUS
DOCUMENT NUMBER: 140:163679
TITLE: Synthesis of amino-bridged 6,6'-disubstituted-2,2'-bipyridine ligands for lanthanide coordination chemistry
AUTHOR(S): Mameri, Samir; Charbonniere, Loic J.; Ziessel, Raymond F.
CORPORATE SOURCE: Laboratoire de Chimie Moleculaire, associe au CNRS, ECPM, Strasbourg, 67087/02, Fr.
SOURCE: Synthesis (2003), (17), 2713-2719
CODEN: SYNTBF; ISSN: 0039-7881
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:163679
AB Three cognate ligands containing bipyridine carboxylic frameworks were readily prepared under mild conditions from a pivotal 6-bromo-6'-bromomethyl-2,2'-bipyridine building block and a primary amine as starting materials. In one case, the amine was adequately functionalized with a nitro group. Transformation of the resulting bromo derivs. to the corresponding Et esters was made possible by the use of a carboethoxylation reaction promoted by palladium(0), while further hydrolysis afforded the targeted acids after protonation. Corresponding europium complexes show interesting luminescence properties in water at biol. pH values.
IT 656258-99-0P 656259-01-7P 656259-03-9P
656259-05-1P 656259-07-3P 656259-09-5P
656259-11-9P 656259-13-1P 656259-15-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of amino-bridged disubstituted bipyridine ligands for lanthanide coordination chemical)
RN 656258-99-0 CAPLUS
CN [2,2'-Bipyridine]-6-methanamine, 6'-bromo-N-[(6'-bromo[2,2'-bipyridin]-6-yl)methyl]-N-butyl- (CA INDEX NAME)



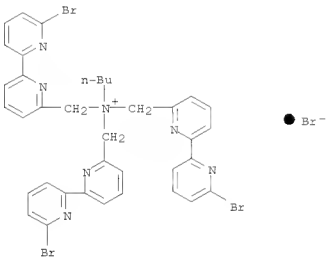
RN 656259-01-7 CAPLUS
CN [2,2'-Bipyridine]-6-carboxylic acid, 6',6'''-[(butylimino)bis(methylene)]bis-, diethyl ester (9CI) (CA INDEX NAME)



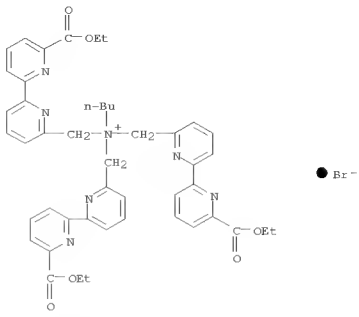
RN 656259-03-9 CAPLUS
CN [2,2'-Bipyridine]-6-carboxylic acid, 6'-[[butyl[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]amino]methyl]- (CA INDEX NAME)



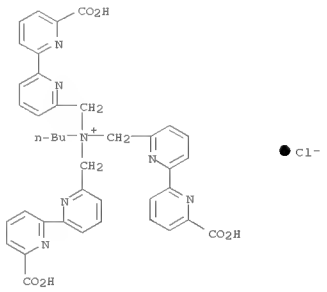
RN 656259-05-1 CAPLUS
CN [2,2'-Bipyridine]-6-methanaminium, 6'-bromo-N,N-bis[(6'-bromo[2,2'-bipyridin]-6-yl)methyl]-N-butyl-, bromide (1:1) (CA INDEX NAME)



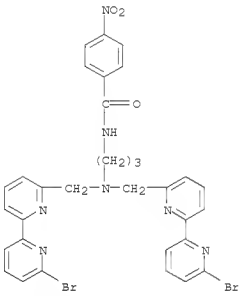
RN 656259-07-3 CAPLUS
CN [2,2'-Bipyridine]-6-methanaminium, N-butyl-6'-(ethoxycarbonyl)-N,N-bis[[6'-(ethoxycarbonyl)[2,2'-bipyridin]-6-yl]methyl]-, bromide (1:1) (CA INDEX NAME)



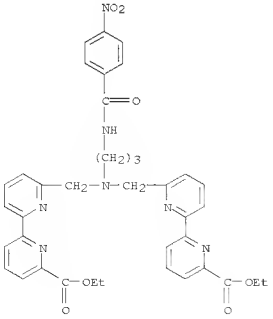
RN 656259-09-5 CAPLUS
CN [2,2'-Bipyridine]-6-methanaminium, N-butyl-6'-carboxy-N,N-bis[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl]-, chloride (1:1) (CA INDEX NAME)



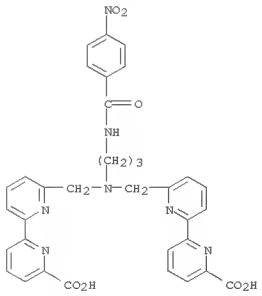
RN 656259-11-9 CAPLUS
CN Benzamide, N-[3-[bis[(6'-bromo[2,2'-bipyridin]-6-yl)methyl]amino]propyl]-4-nitro- (CA INDEX NAME)



RN 656259-13-1 CAPLUS
CN [2,2'-Bipyridine]-6-carboxylic acid, 6',6'''-[[[3-[(4-nitrobenzoyl)amino]propyl]imino]bis(methylene)]bis-, diethyl ester (9CI) (CA INDEX NAME)



RN 656259-15-3 CAPLUS
CN [2,2'-Bipyridine]-6-carboxylic acid, 6'-[[[(6'-carboxy[2,2'-bipyridin]-6-yl)methyl][3-[(4-nitrobenzoyl)amino]propyl]amino]methyl]- (CA INDEX NAME)



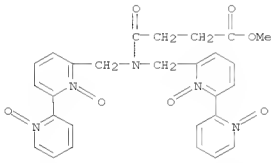
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:69754 CAPLUS
DOCUMENT NUMBER: 139:65615
TITLE: A fluorescent sensor for 2,3-bisphosphoglycerate using
a europium tetra-N-oxide bis-bipyridine complex for both binding and signaling purposes
AUTHOR(S): Best, Michael D.; Anslyn, Eric V.
CORPORATE SOURCE: The University of Texas at Austin, Austin, TX, 78712-1167, USA
SOURCE: Chemistry--A European Journal (2003), 9(1), 51-57
CODEN: CEUJED; ISSN: 0947-6539
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Host 1 was designed and synthesized as a fluorescent sensor for 2,3-bisphosphoglycerate (BPG, 3). The design features a tris-functionalized triethylbenzene core to preorganize binding groups. The three cationic moieties, a tetra-N-oxide bipyridine-europium complex and two ammonium groups, were included to complement the three anionic functionalities on the guest. Beyond acting as a binding site, the europium complex was used to signal binding of the guest through modification of the charge transfer emission. A 1:1 complex with BPG was determined in 50% methanol/acctonitrile with a Ka of 6.7+105 mol-1 by monitoring the reduction of the fluorescence signal upon guest addition In the titration of related glycolytic intermediates lacking a second phosphate (4-6) into host 1, 2:1 host to guest binding was observed Similarly, control compound 2, which lacks the ammonium groups, binds BPG and 4-6 in a 2:1 fashion. Also, phenylphosphate 7 binds to host 1 in a 1:1 stoichiometry with a Ka over three times less than 3.

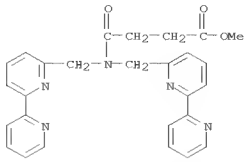
IT 549507-71-3P
RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST
(Analytical study); PREP (Preparation)
(fluorescent sensor for 2,3-bisphosphoglycerate using europium tetra-N-oxide bis-bipyridine complex for both binding and signaling purposes)

RN 549507-71-3 CAPLUS
CN Butanoic acid, 4-[bis[(1,1'-dioxido[2,2'-bipyridin]-6-yl)methyl]amino]-4-oxo-, methyl ester (CA INDEX NAME)



IT 549507-64-4P 549507-65-5P 549507-67-7P
549507-68-8P 549507-70-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(fluorescent sensor for 2,3-bisphosphoglycerate using europium tetra-N-oxide bis-bipyridine complex for both binding and signaling purposes)

RN 549507-64-4 CAPLUS
CN Butanoic acid, 4-[bis([2,2'-bipyridin]-6-ylmethyl)amino]-4-oxo-, methyl ester (CA INDEX NAME)



RN 549507-65-5 CAPLUS
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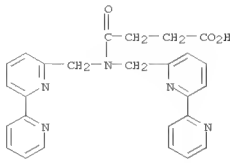
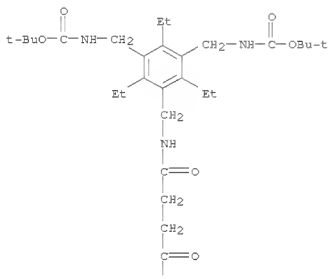
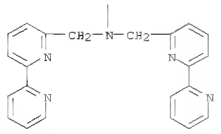
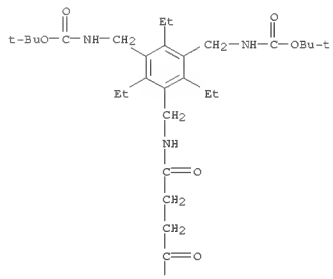


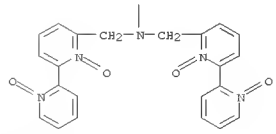
RN 549507-67-7 CAPLUS
CN Carbamic acid, [[5-[[[4-[bis([2,2'-bipyridin]-6-ylmethyl)amino]-1,4-dioxobutyl]amino]methyl]-2,4,6-triethyl-1,3-phenylene]bis(methylene)]bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)





RN 549507-68-8 CAPLUS
CN Carbamic acid, [[5-[[[4-[bis[(1,1'-dioxido[2,2'-bipyridin]-6-yl)methyl]amino]-1,4-dioxobutyl]amino]methyl]-2,4,6-triethyl-1,3-phenylene]bis(methylene)]bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



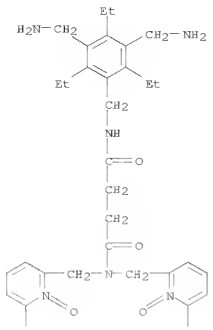


RN 549507-70-2 CAPLUS
CN Butanediamide, N'-[[3,5-bis(aminomethyl)-2,4,6-triethylphenyl]methyl]-N,N-bis[(1,1'-dioxido[2,2'-bipyridin]-6-yl)methyl]-, diacetate (9CI) (CA INDEX NAME)

CM 1

CRN 549507-69-9
CMF C41 H48 N8 O6

PAGE 1-A



PAGE 2-A

CM 2

CRN 64-19-7
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REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

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                 SET NOTICE 1 DISPLAY
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     FILE 'REGISTRY' ENTERED AT 09:12:07 ON 14 MAY 2009
L6             1 S 656258-97-8/RN
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L9             1 S 827305-62-4/RN
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                 SET NOTICE 1 DISPLAY
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     FILE 'REGISTRY' ENTERED AT 09:14:48 ON 14 MAY 2009
L11            1 S 827305-64-6/RN
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L13             1 S 827305-66-8/RN

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L14             1 S L13

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L16             1 S L15

     FILE 'REGISTRY' ENTERED AT 09:17:26 ON 14 MAY 2009
L17             1 S 827305-62-4/RN

     FILE 'CAPLUS' ENTERED AT 09:17:27 ON 14 MAY 2009
L18             2 S L17

     FILE 'REGISTRY' ENTERED AT 09:17:28 ON 14 MAY 2009
L19             1 S 827305-61-3/RN

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L23             1 S 827305-53-3/RN

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L44            39 S L42 SSS FULL

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                                                   ENTRY    SESSION
FULL ESTIMATED COST                                59.40     886.39

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                   ENTRY    SESSION
CA SUBSCRIBER PRICE                                -8.20      -9.84

FILE 'MARPAT' ENTERED AT 09:39:43 ON 14 MAY 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2009 American Chemical Society (ACS)

FILE CONTENT: 1961-PRESENT VOL 150 ISS 20 (20090511/ED)

MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US  20090088416 02 APR 2009
DE 202008013315 26 MAR 2009
EP      2042172 01 APR 2009
JP   2009065074 26 MAR 2009
WO   2009042853 02 APR 2009
GB      2452157 25 FEB 2009
FR      2921369 27 MAR 2009
RU      2350621 27 MAR 2009
CA      2639658 17 MAR 2009

The new MARPAT User Guide is now available at:
 http://www.cas.org/support/stngen/stndoc/marpat.html.

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SAMPLE SEARCH INITIATED 09:39:49 FILE 'MARPAT'
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 38.1% PROCESSED     1474 ITERATIONS                                0 ANSWERS

 43.8% PROCESSED     1695 ITERATIONS                                0 ANSWERS

 50.4% PROCESSED     1951 ITERATIONS                                7 ANSWERS

 51.0% PROCESSED     1974 ITERATIONS                                7 ANSWERS

 51.6% PROCESSED     1995 ITERATIONS                                9 ANSWERS

 51.7% PROCESSED     1998 ITERATIONS                               10 ANSWERS

 51.7% PROCESSED     1998 ITERATIONS                               10 ANSWERS

 51.7% PROCESSED     2000 ITERATIONS  (    11 INCOMPLETE)       11 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.01.58

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        74093 TO    80627
PROJECTED ANSWERS:             148 TO      702

L46          11 SEA SSS SAM L42

=> s l42 sss full
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 15.0% PROCESSED    11871 ITERATIONS  (    21 INCOMPLETE)        21 ANSWERS

 18.2% PROCESSED    14457 ITERATIONS  (    37 INCOMPLETE)        37 ANSWERS

 21.3% PROCESSED    16900 ITERATIONS  (    49 INCOMPLETE)        49 ANSWERS

 25.2% PROCESSED    19991 ITERATIONS  (    67 INCOMPLETE)        67 ANSWERS

 27.5% PROCESSED    21791 ITERATIONS  (    80 INCOMPLETE)        80 ANSWERS

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     FILE 'REGISTRY' ENTERED AT 09:14:18 ON 14 MAY 2009
L10            1 S 827305-61-3/RN
                 SET NOTICE 1 DISPLAY
                 SET NOTICE LOGIN DISPLAY
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                S 827305-51-1/REG# OR   827305-53-3/REG#  OR   827305-55-5/REG#

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L14           1 S L13

     FILE 'REGISTRY' ENTERED AT 09:17:25 ON 14 MAY 2009
L15           1 S 827305-65-7/RN

     FILE 'CAPLUS' ENTERED AT 09:17:25 ON 14 MAY 2009
L16           1 S L15

     FILE 'REGISTRY' ENTERED AT 09:17:26 ON 14 MAY 2009
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L18           2 S L17

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L19           1 S 827305-61-3/RN

     FILE 'CAPLUS' ENTERED AT 09:17:28 ON 14 MAY 2009
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L23           1 S 827305-53-3/RN

     FILE 'CAPLUS' ENTERED AT 09:17:30 ON 14 MAY 2009
L24           1 S L23

     FILE 'REGISTRY' ENTERED AT 09:17:31 ON 14 MAY 2009
L25           1 S 827305-51-1/RN

     FILE 'CAPLUS' ENTERED AT 09:17:31 ON 14 MAY 2009
L26           1 S L25
L27           2 S L26 OR L24 OR L22 OR L20 OR L18 OR L16 OR L14

     FILE 'REGISTRY' ENTERED AT 09:19:22 ON 14 MAY 2009
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L28             STR 827305-61-3
L29           0 S L28 EXA SAM
L30           0 S L28 SSS SAMPLE
L31           2 S L28 SSS FULL
L32           1 S L31 NOT L27

     FILE 'CAPLUS' ENTERED AT 09:21:04 ON 14 MAY 2009
L33           1 S L32
L34           0 S L32 NOT L27

     FILE 'REGISTRY' ENTERED AT 09:21:58 ON 14 MAY 2009
L35             STR 827305-62-4
L36           0 S L35 EXA SAM
L37           0 S L35 SSS SAMPLE
L38           1 S L35 SSS FULL
L39             STRUCTURE UPLOADED
L40           0 S L39 SSS SAMPLE
L41           0 S L39 SSS FULL
L42             STRUCTURE UPLOADED
L43           2 S L42 SSS SAMPLE
L44          39 S L42 SSS FULL

     FILE 'CAPLUS' ENTERED AT 09:36:05 ON 14 MAY 2009
L45          10 S L44

     FILE 'MARPAT' ENTERED AT 09:39:43 ON 14 MAY 2009
L46          11 S L42 SSS SAMPLE
L47             QUE L42

=> d l1 4
YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:y
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L1 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:77721 CAPLUS
DN 142:168342
TI Lanthanide bis(carboxybipyridylmethyl)aminoalkanedicarboxylate complexes and analogs, their preparation and their uses as fluorescence markers and NMR relaxation agents
IN Charbonniere, Loic; Ziessel, Raymond; Wiebel, Nicolas; Roda, Aldo; Guardigli, Massimo
PA Centre National de la Recherche Scientifique, Fr.; Universite Louis Pasteur de Strasbourg
SO Fr. Demande, 50 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2857967	A1	20050128	FR 2003-9158	20030725
	CA 2533698	A1	20050217	CA 2004-2533698	20040720
	WO 2005014581	A2	20050217	WO 2004-FR1921	20040720
	WO 2005014581	A3	20050331		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1648883	A2	20060426	EP 2004-785982	20040720
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
	JP 2006528934	T	20061228	JP 2006-521610	20040720
	MX 2006000843	A	20060720	MX 2006-843	20060123
	US 20080044923	A1	20080221	US 2006-565804	20060125

<--
PRAI FR 2003-9158 A 20030725
WO 2004-FR1921 W 20040720
OS CASREACT 142:168342; MARPAT 142:168342
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d l1 4 ind
YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:y
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L1 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN

IC ICM C07D401-14
ICS C07F009-58; C07D213-55; C07D213-79; C07D207-36

CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 9, 27, 73, 79, 80

ST lanthanide carboxybipyridylmethylaminoalkanedicarboxylate prepn fluorescence marker NMR relaxation agent; glutamate carboxybipyridylmethyl prepn complexation lanthanide

IT Imaging agents
(NMR contrast; lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as NMR relaxation agents)

IT Fluorescent substances
(fluorescent markers; lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates)

IT Shift reagents
(lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates)

IT Rare earth complexes
RL: ARG (Analytical reagent use); DGN (Diagnostic use); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)

IT Albumins, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(serum; preparation of bovine serum albumin conjugates with lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylate chelate as fluorescent marker)

IT 827601-09-2P 827601-10-5P 827601-11-6P
RL: ARG (Analytical reagent use); DGN (Diagnostic use); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)

IT 827305-59-9P 827305-63-5P 827599-56-4P 827600-21-5P 827601-12-7P
RL: ARG (Analytical reagent use); DGN (Diagnostic use); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)

IT 762-04-9, Diethyl phosphite 3886-69-9, (+)-α-Methylbenzylamine 6066-82-6, N-Hydroxysuccinimide 16115-80-3, Dimethyl aminomalonate hydrochloride 23150-65-4, Dimethyl L-glutamate hydrochloride 130897-00-6, 6-Bromo-6'-methyl-2,2'-bipyridine
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)

IT 656258-97-8P 827305-51-1P 827305-53-3P 827305-55-5P 827305-61-3P 827305-62-4P 827305-65-7P 827305-66-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)

L1 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

IT 827305-64-6P 827599-56-4DP, conjugate with bovine serum albumin 827600-21-5DP, conjugate with bovine serum albumin
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of lanthanide(III) bis(carboxybipyridylmethyl)aminoalkanedicarboxylates chelates as fluorescent markers and NMR relaxation agents)

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=> file caplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.48     902.94

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                           ENTRY    SESSION
CA SUBSCRIBER PRICE                                         0.00      -9.84

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FILE COVERS 1907 - 14 May 2009  VOL 150 ISS 20
FILE LAST UPDATED: 13 May 2009  (20090513/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Feb 2009

CAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

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This file contains CAS Registry Numbers for easy and accurate

=> s Imaging agents and NMR contrast (l) lanthanide(III) (l) carboxylates
MISSING OPERATOR 'LANTHANIDE(III'
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s Imaging agents and NMR contrast (l) lanthanide (l) carboxylates
        250099 IMAGING
           122 IMAGINGS
        250149 IMAGING
                  (IMAGING OR IMAGINGS)
       1447216 AGENTS
            11 AGENTSES
       1447220 AGENTS
                  (AGENTS OR AGENTSES)
         14671 IMAGING AGENTS
                  (IMAGING(W)AGENTS)
        470930 NMR
            92 NMRS
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        470960 NMR
                 (NMR OR NMRS)
        613714 CONTRAST
         12862 CONTRASTS
        624706 CONTRAST
                 (CONTRAST OR CONTRASTS)
          2032 NMR CONTRAST
                 (NMR(W)CONTRAST)
         44002 LANTHANIDE
         12304 LANTHANIDES
         48668 LANTHANIDE
                 (LANTHANIDE OR LANTHANIDES)
         19172 CARBOXYLATES
             0 NMR CONTRAST (L) LANTHANIDE (L) CARBOXYLATES
L48          0 IMAGING AGENTS AND NMR CONTRAST (L) LANTHANIDE (L) CARBOXYLATES

=> s Imaging agents and NMR contrast (l) lanthanide (l) carboxylate
        250099 IMAGING
           122 IMAGINGS
        250149 IMAGING
                 (IMAGING OR IMAGINGS)
       1447216 AGENTS
            11 AGENTSES
       1447220 AGENTS
                 (AGENTS OR AGENTSES)
         14671 IMAGING AGENTS
                 (IMAGING(W)AGENTS)
        470930 NMR
            92 NMRS
        470960 NMR
                 (NMR OR NMRS)
        613714 CONTRAST
         12862 CONTRASTS
        624706 CONTRAST
                 (CONTRAST OR CONTRASTS)
          2032 NMR CONTRAST
                 (NMR(W)CONTRAST)
         44002 LANTHANIDE
         12304 LANTHANIDES
         48668 LANTHANIDE
                 (LANTHANIDE OR LANTHANIDES)
         80814 CARBOXYLATE
         19172 CARBOXYLATES
         91232 CARBOXYLATE
                 (CARBOXYLATE OR CARBOXYLATES)
             0 NMR CONTRAST (L) LANTHANIDE (L) CARBOXYLATE
L49          0 IMAGING AGENTS AND NMR CONTRAST (L) LANTHANIDE (L) CARBOXYLATE

=> s Imaging agents and NMR contrast (l) lanthanide
        250099 IMAGING
           122 IMAGINGS
        250149 IMAGING
                 (IMAGING OR IMAGINGS)
       1447216 AGENTS
            11 AGENTSES
       1447220 AGENTS
                 (AGENTS OR AGENTSES)
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          14671 IMAGING AGENTS
                  (IMAGING(W)AGENTS)
         470930 NMR
             92 NMRS
         470960 NMR
                  (NMR OR NMRS)
         613714 CONTRAST
          12862 CONTRASTS
         624706 CONTRAST
                  (CONTRAST OR CONTRASTS)
           2032 NMR CONTRAST
                  (NMR(W)CONTRAST)
          44002 LANTHANIDE
          12304 LANTHANIDES
          48668 LANTHANIDE
                  (LANTHANIDE OR LANTHANIDES)
             44 NMR CONTRAST (L) LANTHANIDE
L50          29 IMAGING AGENTS AND NMR CONTRAST (L) LANTHANIDE

=> d scan
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L50 29 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
IC ICM C07C227-18
CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 8
TI Lanthanide DTPA-BMA complex contrast agent preparation
ST gadolinium DTPA BMA contrast agent prepn; MRI contrast agent prepn
lanthanide; lanthanide DTPA BMA contrast agent prepn; rare earth
polyaminopolycarboxylate contrast agent prepn
IT Imaging agents
(NMR contrast; preparation of lanthanide
polyaminopolycarboxylate complexes as MRI contrast agents)
IT Rare earth complexes
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
study); PREP (Preparation); USES (Uses)
(preparation of lanthanide polyaminopolycarboxylate complexes as MRI
contrast agents)
IT 144-62-7, Oxalic acid, uses
RL: CAT (Catalyst use); USES (Uses)
(for preparation of lanthanide polyaminopolycarboxylate complexes as
MRI
contrast agents)
IT 67-43-6, DTPA 120064-62-9, Gadolinium(III) oxide 119895-95-3, DTPA-BMA
120041-08-9, HP-DO3A
RL: RCT (Reactant); RACT (Reactant or reagent)
(for preparation of lanthanide polyaminopolycarboxylate complexes as
MRI
contrast agents)
IT 20694-16-0P 120066-54-8P 131410-48-5P, Gadolinium DTPA-BMA
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
study); PREP (Preparation); USES (Uses)
(preparation of lanthanide polyaminopolycarboxylate complexes as MRI
contrast agents)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L50 29 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
CC 8-9 (Radiation Biochemistry)
TI Rigidified macrocyclic lanthanide chelates for magnetic resonance imaging
ST macrocyclic lanthanide chelate MRI contrast agent; magnetic resonance
imaging macrocyclic lanthanide chelate
IT Imaging agents
Imaging agents
(NMR contrast; rigidified macrocyclic
lanthanide chelates for magnetic resonance imaging)
IT Chelates
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study);
USES
(Uses)
(macrocyclic lanthanide; rigidified macrocyclic lanthanide chelates
for
magnetic resonance imaging)
IT 192764-93-5
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study);
USES
(Uses)
(isomers; rigidified macrocyclic lanthanide chelates for magnetic
resonance imaging)
IT 83243-47-4
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study);
USES
(Uses)
(rigidified macrocyclic lanthanide chelates for magnetic resonance
imaging)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L50 29 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN
CC 8-9 (Radiation Biochemistry)
Section cross-reference(s): 67, 78, 77, 73
TI Synthesis and characterization of DOTA-(amide)4 derivatives: equilibrium
and kinetic behavior of their lanthanide(III) complexes
ST DOTA amide deriv equil kinetics lanthanide complex; MRI contrast agent
trivalent lanthanide DOTA complex
IT INDEXING IN PROGRESS
IT Imaging agents
(NMR contrast; synthesis and characterization of
DOTA-(amide)4 derivs. with equilibrium and kinetic behavior of their
lanthanide(III) complexes)
IT Protonation
(constant; synthesis and characterization of DOTA-(amide)4 derivs.
with
equilibrium and kinetic behavior of their lanthanide(III) complexes)
IT Crystal structure-property relationship
(ionic radius; synthesis and characterization of DOTA-(amide)4 derivs.
with equilibrium and kinetic behavior of their lanthanide(III)
complexes)
IT Rare earth metals
RL: PEP (Physical, engineering or chemical process); PRP (Properties);
RCT
(Reactant); PROC (Process); RACT (Reactant or reagent)
(ions; synthesis and characterization of DOTA-(amide)4 derivs. with
equilibrium and kinetic behavior of their lanthanide(III) complexes)
IT Amide group
Basicity
Complexation kinetics
Deprotonation
Dissociation kinetics
Equilibrium
Formation constant
NMR (nuclear magnetic resonance)
Reaction kinetics
pH
(synthesis and characterization of DOTA-(amide)4 derivs. with
equilibrium
and kinetic behavior of their lanthanide(III) complexes)
IT Rare earth complexes
RL: DGN (Diagnostic use); PEP (Physical, engineering or chemical
process);
PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study);
PREP (Preparation); PROC (Process); USES (Uses)
(synthesis and characterization of DOTA-(amide)4 derivs. with
equilibrium
and kinetic behavior of their lanthanide(III) complexes)
IT Ligands
RL: PEP (Physical, engineering or chemical process); PRP (Properties);
RCT
(Reactant); PROC (Process); RACT (Reactant or reagent)
(synthesis and characterization of DOTA-(amide)4 derivs. with
equilibrium
and kinetic behavior of their lanthanide(III) complexes)
IT 165463-89-8 220095-70-5 230624-65-4 230624-74-5 230624-77-8
433716-74-6 1011489-87-4
RL: DGN (Diagnostic use); FMU (Formation, unclassified); PEP (Physical,
engineering or chemical process); PRP (Properties); BIOL (Biological
study); FORM (Formation, nonpreparative); PROC (Process); USES (Uses)
(synthesis and characterization of DOTA-(amide)4 derivs. with
equilibrium

L50 29 ANSWERS CAPLUS COPYRIGHT 2009 ACS on STN (Continued)
and kinetic behavior of their lanthanide(III) complexes)
IT 165287-86-5 165287-89-8 277333-05-8 277333-26-3
RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical
process); PRP (Properties); FORM (Formation, nonpreparative); PROC
(Process)
(synthesis and characterization of DOTA-(amide)4 derivs. with
equilibrium
and kinetic behavior of their lanthanide(III) complexes)
IT 14127-61-8, calcium(2+) 14913-52-1, neodymium(3+) 15158-11-9,
copper(2+) 18923-26-7, cerium(3+) 22537-22-0, magnesium(2+)
22541-18-0, europium(3+) 22541-19-1, gadolinium(3+) 22541-21-5,
dysprosium(3+) 22541-23-7, thulium(3+) 22541-24-8, lutetium(3+)
23713-49-7, zinc(2+) 157599-02-5 219143-29-0 331623-97-3
368432-31-9
RL: PEP (Physical, engineering or chemical process); PRP (Properties);
RCT
(Reactant); PROC (Process); RACT (Reactant or reagent)
(synthesis and characterization of DOTA-(amide)4 derivs. with
equilibrium
and kinetic behavior of their lanthanide(III) complexes)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

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=> s ?carboxy?(1t)?bipyridyl?(1t)?methyl?
        893574 ?CARBOXY?
         10847 ?BIPYRIDYL?
TERM '?METHYL?' EXCEEDED TRUNCATION LIMITS - SEARCH ENDED
You have entered a truncated stem which occurs in too many terms.
Make the stem longer and try again.  For example, if your original
term was 'degr?' to search for variations and the abbreviation for
'degradation', you could replace it with the expression '(degrdn OR
degrad?)'.  If your search term was numeric, e.g., 'C>5', reduce the
size of the range.

=> file registry
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                42.08     945.02

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                   ENTRY    SESSION
CA SUBSCRIBER PRICE                                 0.00      -9.84

FILE 'REGISTRY' ENTERED AT 10:01:28 ON 14 MAY 2009
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STRUCTURE FILE UPDATES:   13 MAY 2009  HIGHEST RN 1146612-21-6
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If you are searching in a field that uses implied proximity, and you used a truncation symbol after a punctuation mark, the system may interpret the truncation symbol as being at the beginning of a term. Implied proximity is used in search fields indexed as single words, for example, the Basic Index.

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=> d his

     (FILE 'HOME' ENTERED AT 09:04:49 ON 14 MAY 2009)

     FILE 'CAPLUS' ENTERED AT 09:05:01 ON 14 MAY 2009
                E US2006-565804/AP
L1             4 S E3

     FILE 'REGISTRY' ENTERED AT 09:09:56 ON 14 MAY 2009
L2             1 S 827601-09-2/RN
                 SET NOTICE 1 DISPLAY
                 SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:10:36 ON 14 MAY 2009
L3             1 S 827601-10-5/RN
                 SET NOTICE 1 DISPLAY
                 SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:10:54 ON 14 MAY 2009
L4             1 S 827305-59-9/RN
                 SET NOTICE 1 DISPLAY
                 SET NOTICE LOGIN DISPLAY
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                SET NOTICE 1 DISPLAY
                SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:14:48 ON 14 MAY 2009
L11             1 S 827305-64-6/RN
                SET NOTICE 1 DISPLAY
                SET NOTICE LOGIN DISPLAY

     FILE 'REGISTRY' ENTERED AT 09:15:30 ON 14 MAY 2009
L12             1 S 827599-56-4/RN
                SET NOTICE 1 DISPLAY
                SET NOTICE LOGIN DISPLAY

     FILE 'CAPLUS' ENTERED AT 09:17:18 ON 14 MAY 2009
                S 827305-51-1/REG# OR   827305-53-3/REG#  OR   827305-55-5/REG#

     FILE 'REGISTRY' ENTERED AT 09:17:24 ON 14 MAY 2009
L13             1 S 827305-66-8/RN

     FILE 'CAPLUS' ENTERED AT 09:17:25 ON 14 MAY 2009
L14             1 S L13

     FILE 'REGISTRY' ENTERED AT 09:17:25 ON 14 MAY 2009
L15             1 S 827305-65-7/RN

     FILE 'CAPLUS' ENTERED AT 09:17:25 ON 14 MAY 2009
L16             1 S L15

     FILE 'REGISTRY' ENTERED AT 09:17:26 ON 14 MAY 2009
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L27           2 S L26 OR L24 OR L22 OR L20 OR L18 OR L16 OR L14

     FILE 'REGISTRY' ENTERED AT 09:19:22 ON 14 MAY 2009
L28             STR 827305-61-3
L29           0 S L28 EXA SAM
L30           0 S L28 SSS SAMPLE
L31           2 S L28 SSS FULL
L32           1 S L31 NOT L27

     FILE 'CAPLUS' ENTERED AT 09:21:04 ON 14 MAY 2009
L33           1 S L32
L34           0 S L32 NOT L27

     FILE 'REGISTRY' ENTERED AT 09:21:58 ON 14 MAY 2009
L35             STR 827305-62-4
L36           0 S L35 EXA SAM
L37           0 S L35 SSS SAMPLE
L38           1 S L35 SSS FULL
L39             STRUCTURE UPLOADED
L40           0 S L39 SSS SAMPLE
L41           0 S L39 SSS FULL
L42             STRUCTURE UPLOADED
L43           2 S L42 SSS SAMPLE
L44          39 S L42 SSS FULL

     FILE 'CAPLUS' ENTERED AT 09:36:05 ON 14 MAY 2009
L45          10 S L44

     FILE 'MARPAT' ENTERED AT 09:39:43 ON 14 MAY 2009
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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	33.06	978.08

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-9.84

FILE 'CAPLUS' ENTERED AT 10:02:54 ON 14 MAY 2009

FILE COVERS 1907 - 14 May 2009 VOL 150 ISS 20
FILE LAST UPDATED: 13 May 2009 (20090513/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

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=>
Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	19.72	997.80

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-9.84

STN INTERNATIONAL LOGOFF AT 10:18:32 ON 14 MAY 2009

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STN patent clusters
NEWS 14 FEB 25 USGENE enhanced with patent family and legal status display data from INPADOCDB
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NEWS 18 MAR 20 CAS databases on STN enhanced with new super role for nanomaterial substances
NEWS 19 MAR 23 CA/CAplus enhanced with more than 250,000 patent equivalents from China
NEWS 20 MAR 30 IMSPATENTS reloaded and enhanced
NEWS 21 APR 03 CAS coverage of exemplified prophetic substances enhanced
NEWS 22 APR 07 STN is raising the limits on saved answers
NEWS 23 APR 24 CA/CAplus now has more comprehensive patent assignee information
NEWS 24 APR 26 USPATFULL and USPAT2 enhanced with patent assignment/reassignment information
NEWS 25 APR 28 CAS patent authority coverage expanded
NEWS 26 APR 28 ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS 27 APR 28 Limits doubled for structure searching in CAS REGISTRY
NEWS 28 MAY 08 STN Express, Version 8.4, now available
NEWS 29 MAY 11 STN on the Web enhanced
NEWS 30 MAY 11 BEILSTEIN substance information now available on STN Easy
NEWS 31 MAY 14 DGENE, PCTGEN and USGENE enhanced with increased

=>
Connecting via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID:ssptajqm1797

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'HOME' AT 08:33:41 ON 18 MAY 2009
FILE 'HOME' ENTERED AT 08:33:41 ON 18 MAY 2009

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.44	0.44

=>
Uploading
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Do you want to switch to the Registry File?
Choice (Y/n):
Switching to the Registry File...
Some commands only work in certain files. For example, the EXPAND
command can only be used to look at the index in a file which has an
index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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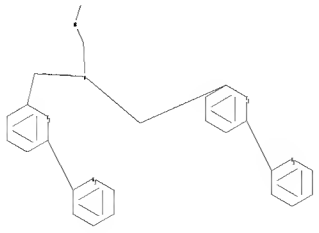
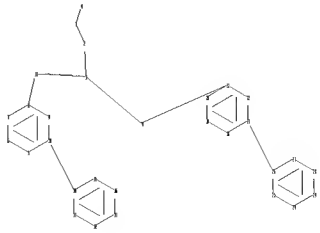
Uploading C:\Program Files\STNEXP\Queries\10565804-broader1a.str





Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom
29:Atom 30:CLASS

L1 STRUCTURE UPLOADED

=> file marpat

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.48	1.14

FILE 'MARPAT' ENTERED AT 08:34:31 ON 18 MAY 2009

FILE CONTENT: 1961-PRESENT VOL 150 ISS 19 (20090515/ED)

MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 20090088593 02 APR 2009

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 51.7% PROCESSED     2000 ITERATIONS  (    11 INCOMPLETE)       11 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.01.53

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        74112 TO    80648
PROJECTED ANSWERS:             148 TO      702

L2           11 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 08:41:20 FILE 'MARPAT'
FULL SCREEN SEARCH COMPLETED -    79260 TO ITERATE

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  6.4% PROCESSED     5046 ITERATIONS                           0 ANSWERS

 10.5% PROCESSED     8318 ITERATIONS  (     5 INCOMPLETE)       5 ANSWERS

 14.6% PROCESSED    11534 ITERATIONS  (    20 INCOMPLETE)      20 ANSWERS

 17.7% PROCESSED    14010 ITERATIONS  (    34 INCOMPLETE)      34 ANSWERS

 21.0% PROCESSED    16614 ITERATIONS  (    44 INCOMPLETE)      44 ANSWERS

 24.5% PROCESSED    19385 ITERATIONS  (    61 INCOMPLETE)      61 ANSWERS
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64.4% PROCESSED 51081 ITERATIONS (304 INCOMPLETE) 305 ANSWERS

66.4% PROCESSED 52656 ITERATIONS (316 INCOMPLETE) 317 ANSWERS

68.7% PROCESSED 54482 ITERATIONS (333 INCOMPLETE) 334 ANSWERS

71.4% PROCESSED 56625 ITERATIONS (343 INCOMPLETE) 345 ANSWERS

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79.1% PROCESSED 62705 ITERATIONS (391 INCOMPLETE) 393 ANSWERS

81.4% PROCESSED 64510 ITERATIONS (414 INCOMPLETE) 416 ANSWERS

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87.3% PROCESSED 69228 ITERATIONS (464 INCOMPLETE) 466 ANSWERS

88.6% PROCESSED 70261 ITERATIONS (473 INCOMPLETE) 475 ANSWERS

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96.4% PROCESSED    76421 ITERATIONS  (   532 INCOMPLETE)      535 ANSWERS
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100.0% PROCESSED    79260 ITERATIONS  (   544 INCOMPLETE)      547 ANSWERS
SEARCH TIME: 00.24.03

L3          547 SEA SSS FUL L1

=> sel pn
E# OR SYSTEM LIMIT REACHED WHILE PROCESSING ANSWER 205
E1 THROUGH E999 ASSIGNED

=> file caplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                               230.70     231.84

FILE 'CAPLUS' ENTERED AT 09:07:37 ON 18 MAY 2009
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=> d scan
YOU HAVE REQUESTED DATA FROM FILE 'MARPAT' - CONTINUE? (Y)/N:y
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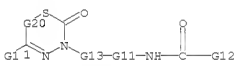
L3 547 ANSWERS MARPAT COPYRIGHT 2009 ACS on STN
CC 28-20 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 63
TI Preparation of substituted 5-phenyl-3,6-dihydro-2-oxo-6H-1,3,4-thiadiazines as Met kinase inhibitors for treating tumors
ST phenyldihydrooxothiadiazine prepn Met kinase inhibitor; thiadiazinone phenyl prepn antitumor agent
IT Myeloid leukemia
(acute, treatment; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT Lung, neoplasm
(adenocarcinoma, treatment; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT Mammary gland, neoplasm
(carcinoma, treatment; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT Intestine, neoplasm
(colon, carcinoma, treatment; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT Carcinoma
(colon, treatment; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT Neuroglia, neoplasm
(glioblastoma, treatment; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT Neoplasm
(head and neck, treatment; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT Medical goods
(infusion sets; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT Carcinoma
(mammary, treatment; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT Immune disease
(neoplasm, treatment; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT Antitumor agents
Combination chemotherapy
Drug delivery systems
Human
(preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT Adenocarcinoma
(pulmonary adenocarcinoma, treatment; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT Epithelium
(squamous, neoplasm, treatment; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating

L3 547 ANSWERS MARPAT COPYRIGHT 2009 ACS on STN (Continued)
(prepn. of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)

MSTR 1



G20 = (0-1) CH2
Patent location: claim 1
Note: and pharmaceutically acceptables derivatives, solvates, salts, and tautomers
Stereochemistry: and stereoisomers

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

L3 547 ANSWERS MARPAT COPYRIGHT 2009 ACS on STN (Continued)
tumors)
IT Acute lymphocytic leukemia
Bladder, neoplasm
Blood vessel, neoplasm
Brain, neoplasm
Carcinoma
Cervix, neoplasm
Chronic lymphocytic leukemia
Chronic myeloid leukemia
Esophagus, neoplasm
Head and Neck, neoplasm
Intestine, neoplasm
Kidney, neoplasm
Larynx, neoplasm
Lung, neoplasm
Lymphatic system, neoplasm
Monocytic leukemia
Neoplasm
Pancreas, neoplasm
Prostate gland, neoplasm
Small-cell lung carcinoma
Stomach, neoplasm
Thyroid gland, neoplasm
Urogenital system, neoplasm
(treatment; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT 137632-03-2, Met kinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT 937281-70-4P 937281-71-5P 937281-72-6P 937281-73-7P 937281-74-8P
937281-75-9P 937281-76-0P 937281-77-1P 937281-78-2P 937281-79-3P
937281-80-6P 937281-81-7P 937281-82-8P 937281-83-9P 937281-84-0P
937281-85-1P 937281-86-2P 937281-87-3P 937281-88-4P 937281-89-5P
937281-90-8P 937281-91-9P 937281-92-0P 937281-93-1P 937281-94-2P
937281-95-3P 937281-96-4P 937281-97-5P 937281-98-6P 937282-00-3P
937282-03-6P 937282-04-7P 937282-05-8P 937282-06-9P 937282-07-0P
937282-08-1P 937282-09-2P 937282-10-5P 937282-11-6P 937282-12-7P
937282-13-8P 937282-14-9P 937282-15-0P 937282-16-1P 937282-17-2P
937282-18-3P 937282-19-4P 937282-20-7P 937282-21-8P 937282-22-9P
937282-23-0P 937282-24-1P 937282-25-2P 937282-26-3P 937282-27-4P
937282-28-5P 937282-29-6P 937282-30-9P 937282-31-0P 937282-32-1P
937282-33-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT 99-91-2 140-89-6 622-93-5, 3-Diethylaminopropan-1-ol 1450-74-4
3282-30-2, Pivalyl chloride 3958-57-4, 3-Nitrobenzyl bromide
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of substituted phenyldihydrooxothiadiazines as Met kinase inhibitors for treating tumors)
IT 536-38-9P 4468-82-0P 87427-66-5P 937169-17-0P 937169-18-1P
937281-99-7P 937282-01-4P 937282-02-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

=> file caplus
COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION
FULL ESTIMATED COST | 0.50 | 233.32

FILE 'CAPLUS' ENTERED AT 09:08:11 ON 18 MAY 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 18 May 2009 VOL 150 ISS 21
FILE LAST UPDATED: 17 May 2009 (20090517/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

=> d l4 1-14 ibib abs hitstr

L4 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:674934 CAPLUS
DOCUMENT NUMBER: 149:17767
TITLE: Compositions of Chk1 kinase inhibitor for cancer treatment
INVENTOR(S): Colvin, Anita A.; Koppenol, Sandy; Wisdom, Wendy A.
PATENT ASSIGNEE(S): Icos Corporation, USA
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008067027	A2	20080605	WO 2007-US80150	20071002
WO 2008067027	A3	20090416		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
AU 2007325576	A1	20080605	AU 2007-325576	20071002
PRIORITY APPLN. INFO.:			US 2006-853056P P	20061020
			WO 2007-US80150 W	20071002

OTHER SOURCE(S): MARPAT 149:17767
AB Compns. containing at least one Chk1 kinase inhibitor and at lease one cyclodextrin are disclosed. Also disclosed are methods of treating a proliferative disorders, especially cancer or potentiating a cancer treatment with a composition comprising at least one Chk1 inhibitor and at least one cyclodextrin. Thus, an injection solution was formulated containing a disubstituted urea Chk1 inhibitor 50 mg, Captisol 16.66 mg, HCl and NaOH to pH 4.5, and water to 1 mL. Captisol improved chemical stability of the Chk1 inhibitor compared to a solution containing a Chk1 inhibitor mesylate salt and dextrose. Degradation of Chk1 inhibitor was found to be accelerated by moisture and heat. After storage at 40°/75% RH, the Captisol-containing formulation contained 3.06 and 4.96% of related impurities after 1 and 2 mo, resp., while the non-Captisol containing formulation contained 4.41 and 7.10% of impurities at the resp. time points.

L4 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:469244 CAPLUS
DOCUMENT NUMBER: 144:488679
TITLE: Preparation of 1,4-bis(3-aminoalkyl)piperazine derivatives for use in the treatment of neurodegenerative diseases
INVENTOR(S): Sergeant, Nicolas; Delacourte, Andre; Melnyk, Patricia; Buee, Luc
PATENT ASSIGNEE(S): Institut National de la Sante et de la Recherche Medicale (INSERM), Fr.; Universite du Droit et de la Sante - Lille II
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006051489	A1	20060518	WO 2005-IB53676	20051108
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
CA 2585983	A1	20060518	CA 2005-2585983	20051108
EP 1809288	A1	20070725	EP 2005-803710	20051108
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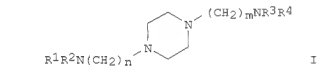
JP 2008519825	T	20080612	JP 2007-540794	20051108
PRIORITY APPLN. INFO.:			EP 2004-292674 A	20041110
			WO 2005-IB53676 W	20051108

OTHER SOURCE(S): MARPAT 144:488679
GI

L4 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



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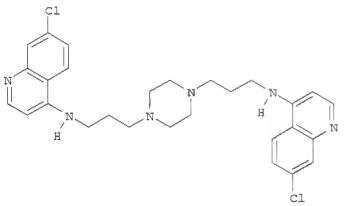

II

AB Title compds. I [m and n independently represent integer ≥ 2 with the resulting hydrocarbon chain optionally comprising heteroatoms; R1-4 independently = H, alkyl, alkenyl, alkynyl, aryl, etc], and their pharmaceutically acceptable salts, are prepared and disclosed for use in treating neurodegenerative diseases, related neurodegenerative diseases, developmental diseases or cancer. Thus, e.g., II, was prepared by reaction of 4,7-dichloroquinoline with 1,4-bis(3-aminopropyl)piperazine. Bioassay data is provided for the impact of I on the levels of amyloid protein precursor carboxy-terminal fragments (APP-CTFs) α, β, and γ stubs and on the resulting Aβ peptide. Further, the use of I in the manufacture of a medical imaging agent intended for the diagnostic in the human being of a pathol. or nonpathol. status linked with APP or APP-like proteins is disclosed.
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:147730 CAPLUS
DOCUMENT NUMBER: 144:233378
TITLE: Multidentate aza ligands able to complex metal ions and the their use in diagnostics and therapy
INVENTOR(S): Giovenzana, Giovanni Battista; Palmisano, Giovanni; Sisti, Massimo; Cavallotti, Camilla; Aime, Silvio; Calabi, Luisella; Swenson, Rolf; Kondareddiar, Ramalingam; Lattuada, Luciano; Morosini, Pierfrancesco
PATENT ASSIGNEE(S): Italy
SOURCE: U.S. Pat. Appl. Publ., 73 pp., Cont.-in-part of U.S. Ser. No. 484,111.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060034773	A1	20060216	US 2005-165793	20050624
IT 2001MI1518	A1	20030117	IT 2001-MI1518	20010717
WO 2003008390	A1	20030130	WO 2002-EP7658	20020710
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EP 1803711	A1	20070704	EP 2007-3558	20020710
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US 20040156786	A1	20040812	US 2004-484111	20040115
US 7186400	B2	20070306		
WO 2006136564	A1	20061228	WO 2006-EP63368	20060620
WO 2006136564	A9	20080207		
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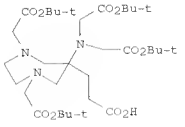
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
EP 1904460	A1	20080402	EP 2006-777373	20060620
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
JP 2009505946	T	20090212	JP 2008-517490	20060620
CN 101233117	A	20080730	CN 2006-80022755	20071224
PRIORITY APPLN. INFO.:			IT 2001-MI1518 A	20010717

L4 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

	WO 2002-EP7658	W	20020710
	US 2004-484111	A2	20040115
	EP 2002-767192	A3	20020710
	US 2005-165793	A	20050624
	WO 2006-EP63368	W	20060620

OTHER SOURCE(S): CASREACT 144:233378; MARPAT 144:233378
GI



I

AB The invention relates to multidentate aza ligands such as 1,4-butanediamines or 1,4-diazepanes substituted with iminodiacetate, carboxyalkyl and related groups (including peptides), which were prepared and complexed with radioelements for use as contrast agents in magnetic resonance imaging (MRI). Thus, ligand I was prepared by a multistep procedure starting with reaction of N,N'-dibenzylethylenediamine with paraformaldehyde and 4-nitrobutyric acid tert-Bu ester. I was coupled with a peptide obtained by solid-phase synthesis and then complexed with lutetium-177. The resulting complex demonstrated efficacy similar to 177-Lu-AMBA for delivering radioactivity to PC-3 tumors.

L4 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:	2005:497209 CAPLUS
DOCUMENT NUMBER:	143:43911
TITLE:	Preparation of scorpionate-like pendant macrocyclic ligands, metal complexes, and compositions thereof as diagnostic imaging agents
INVENTOR(S):	Brechbiel, Martin W.; Chong, Hyun-Soon
PATENT ASSIGNEE(S):	Government of the United States of America, Repres by the Secretary, Dept of Health and Human Ser., USA
SOURCE:	U.S. Pat. Appl. Publ., 24 pp., Cont.-in-part of U.S. Ser. No. 318,821. CODEN: USXXCO
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	2

PATENT INFORMATION:

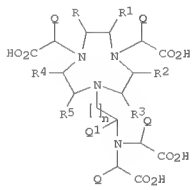
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050123473	A1	20050609	US 2005-516047	20050125
US 7163935	B2	20070116		
US 20030228262	A1	20031211	US 2002-318821	20021213
US 7081452	B2	20060725		
WO 2003101919	A2	20031211	WO 2003-US17460	20030603
WO 2003101919	A3	20040722		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:	US 2002-385371P	P	20020603
	US 2002-318821	A2	20021213
	WO 2003-US17460	W	20030603

OTHER SOURCE(S): CASREACT 143:43911; MARPAT 143:43911
GI



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L4 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

AB There are provided substituted 1,4,7-triazacyclononane-N,N',N''-triacetic acid compds. with a pendant donor amino group (I) [wherein R, R1-5, Q = independently H, alkyl, cycloalkyl, alkoxy, hydroxyalkyl, aryl, aryloxy, hydroxyaryl, heteroaryl, thioalkyl, thioaryl, NH2, acid-containing group; Q1 = H, p-X-C6H4-(CH2)m- (wherein C6H4 = phenylene; X = H, halo, alkyl, HO, NO2, NH2, alkylamino, thiocyano, isothiocyano, alkoxy, aryloxy, aralkoxy, carboxy, carboxyalkyl, carboxyalkyloxy, amido, alkylamido, haloalkylamido; m = 1-5); n = 1, 2], metal complexes thereof, compns. thereof, and methods of use in diagnostic imaging such as magnetic resonance image, x-ray contrast image, and a single photon emission computed spectroscopy (SPECT) and treatment of a cellular disorder. Thus, 1,8-bis[(toluene-4-sulfonyl)oxy]-3,6-bis[(toluene-4-sulfonyl)]-3,6-diazaoctane and ethanolamine or propanolamine were refluxed in MeCN for 24 h to give 2-[4,7-bis(toluene-4-sulfonyl)-[1,4,7]triazacyclononan-1-yl]ethanol or 3-[4,7-bis(toluene-4-sulfonyl)-[1,4,7]triazacyclononan-1-yl]propan-1-ol, resp., which was chlorinated by SOCl2 in benzene at 60° for 3 h, followed by azidolysis with NaN3 in DMSO at 90° for 4 h and hydrogenation over 10% Pd-C under H (25 psi) to give [2-[4,7-bis(toluene-4-sulfonyl)-[1,4,7]triazacyclononan-1-yl]ethyl]amine (II) or [3-[4,7-bis(toluene-4-sulfonyl)-[1,4,7]triazacyclononan-1-yl]propyl]amine, (III), resp. Hydrolysis of II and III in concentrated H2SO4 at 115° for 72 h followed by N-alkylation with tert-Bu bromoacetate in the presence of K2CO3 in MeCN at 65° for 24 h gave [N-[2-[4,7-bis[(tert-butoxycarbonyl)methyl]-[1,4,7]triazacyclononan-1-yl]ethyl]-N-[(tert-butoxycarbonyl)methyl]amino]acetic acid tert-Bu ester (IV) or [N-[3-[4,7-bis[(tert-butoxycarbonyl)methyl]-[1,4,7]triazacyclononan-1-yl]propyl]-N-[(tert-butoxycarbonyl)methyl]amino]acetic acid tert-Bu ester (V), resp. IV or V was treated with HCl(g)-saturated 1,4-dioxane in an ice bath for 4 h to give [N-[2-[4,7-bis(carboxymethyl)-[1,4,7]triazacyclononan-1-yl]ethyl]-N-(carboxymethyl)amino]acetic acid (VI) tetrahydrochloride or [N-[3-[4,7-bis(carboxymethyl)-[1,4,7]triazacyclononan-1-yl]propyl]-N-(carboxymethyl)amino]acetic acid (VII) tetrahydrochloride. 86Y-VI complex and 86Y-VII were prepared and 86Y-VI complex was stable in serum for up to 14 days with no measurable loss of radioactivity. 86Y-VII was less stable and the percentage of 86Y released form this complex at 14 days was at 25%. In in vivo biodistribution of 86Y-VI complex in female Balb/c mice as compared to 86Y-DOTA complex, both 86Y-VI complex and 86Y-DOTA complex exhibited rapid blood clearance and 86Y-VI complex showed slightly lower bone and kidney accumulation than 86Y-DOTA complex.

L4 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:	2005:77721 CAPLUS
DOCUMENT NUMBER:	142:168342
TITLE:	Lanthanide bis(carboxybipyridylmethyl)aminoalkanedicarboxylate complexes and analogs, their preparation and their uses as fluorescence markers and NMR relaxation agents
INVENTOR(S):	Charbonniere, Loic; Ziessel, Raymond; Wiebel, Nicolas; Roda, Aldo; Guardigli, Massimo
PATENT ASSIGNEE(S):	Centre National de la Recherche Scientifique, Fr.; Universite Louis Pasteur de Strasbourg
SOURCE:	Fr. Demande, 50 pp. CODEN: FRXXBL
DOCUMENT TYPE:	Patent
LANGUAGE:	French
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2857967	A1	20050128	FR 2003-9158	20030725
CA 2533698	A1	20050217	CA 2004-2533698	20040720
WO 2005014581	A2	20050217	WO 2004-FR1921	20040720
WO 2005014581	A3	20050331		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, T2, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

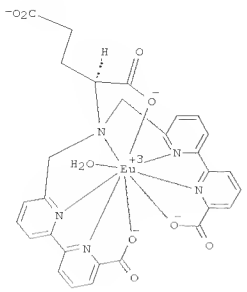
EP 1648883	A2	20060426	EP 2004-785982	20040720

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

JP 2006528934	T	20061228	JP 2006-521610	20040720
MX 2006000843	A	20060720	MX 2006-843	20060123
US 20080044923	A1	20080221	US 2006-565804	20060125
PRIORITY APPLN. INFO.:			FR 2003-9158	A 20030725
			WO 2004-FR1921	W 20040720

OTHER SOURCE(S): CASREACT 142:168342; MARPAT 142:168342
GI

L4 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)



I

AB The invention relates to ligands which chelate lanthanides for use as fluorescence markers or as relaxation agents in NMR imaging. Compds. claimed are R1-X-CR2R3-NR4R5 [R1 = functional group; X = bond, hydrocarbon chain containing at least one alkylene group, heteroatom-containing alkenylene group, or arylene group; R2 = anionic group (A2) at neutral pH or C1-4 alkylene or alkenylene groups containing at least one A2, which may contain a heteroatom in the chain; R3 = H, C1-5 alkylene or alkenylene which may contain a heteroatom in the chain and at least one anionic group (A3) at neutral pH; R4 = substituent having light absorption properties and forms three chelate cycles with a lanthanide; R5 = substituent which allows formation of three chelate cycles with a lanthanide]. The group R1 is capable of reacting with functions present in proteins, antibodies, minerals or organic substances. Example lanthanide compds., e.g., I (Na salt), are prepared with bis(carboxybipyridylmethyl)aminoalkanedicarboxylate ligands.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

with biomols which complex with main group metals and transition metals and rare earth metals. The invention also relates to methods for producing these conjugates and to the use of the same as contrasting media in NMR diagnosis and radiodiagnosis, and for radiotherapy.

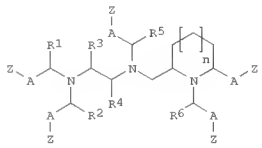
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:857560 CAPLUS
DOCUMENT NUMBER: 141:342445
TITLE: Conjugates of 2,4-ethano-bridged and 2,4-propano-bridged 3,6,9-triaza-nonanoic acid, 3N,6N,9,9N-tetraethanoic acid, and corresponding phosphoric acid methylene derivatives and the substitution products with biomolecules, methods for the production and the use in NMR diagnostics and radiotherapy
INVENTOR(S): Lehmann, Lutz; Friebe, Matthias; Brumby, Thomas; Suelzle, Detlev; Platzek, Joahnnes
PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087656	A1	20041014	WO 2004-EP3003	20040320
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			DE 2003-10316824	A 20030403

OTHER SOURCE(S): MARPAT 141:342445
GI



I

AB The invention relates to conjugates of 2,4-ethano-bridged and 2,4-propano-bridged 3,6,9-triazanonanoic acid, N,N,N-tetraethanoic acid, and corresponding H3PO4 ester methylene derivs. of I (n = 0, 1; Z = H or metal; A = CO2, P(O)(OC1-6-alkyl)O or P(O)(OH)O groups, R1-R6 = H, (un)branched, (un)saturated C1-C25-alkyl connected through O, phenylene, NHCO, CONH, O(CO) and/or NH(CS)NH groups, pyrrole derivs.). I form conjugates

L4 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:220301 CAPLUS
DOCUMENT NUMBER: 140:270550
TITLE: A preparation of 1,3-diamino-2-hydroxypropane derivatives as beta-secretase enzyme inhibitors
INVENTOR(S): Fobian, Yvette M.; Freskos, John N.; Jagodzinska, Barbara
PATENT ASSIGNEE(S): Elan Pharmaceuticals, Inc., USA; Pharmacia & Upjohn
SOURCE: PCT Int. Appl., 535 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004022523	A2	20040318	WO 2003-US28116	20030908
WO 2004022523	A3	20040910		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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CA 2497979	A1	20040318	CA 2003-2497979	20030908
AU 2003268550	A1	20040329	AU 2003-268550	20030908
US 20040214890	A1	20041028	US 2003-657567	20030908
US 7294642	B2	20071113		
EP 1534693	A2	20050601	EP 2003-749520	20030908
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003014071	A	20050705	BR 2003-14071	20030908
JP 2005538162	T	20051215	JP 2004-534764	20030908
CN 1732161	A	20060208	CN 2003-824884	20030908
NZ 538625	A	20080530	NZ 2003-538625	20030908
NO 2005001189	A	20050510	NO 2005-1189	20050304
MX 2005002508	A	20050603	MX 2005-2508	20050304
IN 2005KN00441	A	20060127	IN 2005-KN441	20050316
ZA 2005002755	A	20060222	ZA 2005-2755	20050405
US 20080161325	A1	20080703	US 2007-939148	20071113
PRIORITY APPLN. INFO.:			US 2002-408783P	P 20020906
			US 2003-657567	A3 20030908
			WO 2003-US28116	W 20030908

OTHER SOURCE(S): MARPAT 140:270550
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

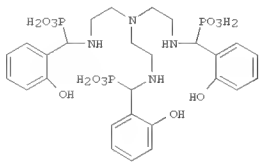
AB The invention relates to diamino(hydroxy)propane derivs. of formula I

L4 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)
[wherein: R1 = -(CH2)1-2-S(O)0-2-(C1-6 alkyl) or (un)substituted (cyclo)alkyl, alk(en/yn)yl, (hetero)aryl, etc.; R2 = H, C1-6 alkyl optionally substituted with 1-3 substituents, (CH2)0-4-(hetero)aryl, C2-6 alk(en/yn)yl, etc.; R3 = H, C1-6 alkyl optionally substituted with 1-3 substituents, (CH2)0-4-(hetero)aryl, etc.; R4 = C1-10 alkyl optionally substituted with 1-3 substituents, -(CH2)0-3-cycloalkyl, -(CR7R8)0-4-(hetero)aryl, etc.; one of R5 and R6 is H and the other is -C(O)(CR9R10)1-6-X-R11, etc.; R7 and R8 are independently selected from H, alkyl, hydroxyalkyl, alk(en/yn)yl, etc.; R9 and R10 are independently selected from H or C1-10 alkyl; R11 = (hetero)aryl, optionally substituted C1-10 alkyl, or C3-8 cycloalkyl, etc.; X = O, S, SO2, etc.]. Compds. I include inhibitors of beta-secretase enzyme useful in the treatment of Alzheimer's disease and other diseases characterized by deposition of A beta-peptide in a mammal. Biol. examples include beta-secretase inhibition, assays using synthetic oligopeptide-substrates, inhibition of A beta prodn. in human patients, etc. For instance, compd. II (prepn. 8) was prepd. via amidation of benzoic acid deriv. III by diamino(hydroxy)propane deriv. IV and subsequent Boc-cleavage (no yield data). Using 19F-NMR an intramol. acyl-migration was obsd. when compd. II was dissolved in DMSO-d6 and pH 4 buffer soln. was added.
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:522419 CAPLUS
DOCUMENT NUMBER: 137:99070
TITLE: Polypodal chelants for metallopharmaceuticals
INVENTOR(S): Liu, Shuang
PATENT ASSIGNEE(S): Bristol-Myers Squibb Pharma Company, USA
SOURCE: U.S. Pat. Appl. Publ., 18 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 20020090342	A1	20020711	US 2001-33770		20011227
US 6776977	B2	20040817			
US 20050058601	A1	20050317	US 2004-876893		20040625
PRIORITY APPLN. INFO.:			US 2001-260615P	P	20010109
			US 2001-33770	A3	20011227

OTHER SOURCE(S): MARPAT 137:99070
GI



I

AB Tripodal polyaminophosphonate chelants are disclosed, as well as chelates of the chelants with metal ions to form radiopharmaceutical and radioactive, MRI and X-ray or CT imaging compds. and compns. Therapeutic and imaging methods of use are also disclosed. E.g., I was prepared and complexed with 111In, 90Y, and 177Lu.
REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:614325 CAPLUS
DOCUMENT NUMBER: 135:189314
TITLE: Preparation of quinoline ligands and metal complexes for diagnosis and therapy
INVENTOR(S): Rajagopalan, Raghavan; Achilefu, Samuel I.; Bugaj, Joseph E.; Dorshow, Richard B.
PATENT ASSIGNEE(S): Mallinckrodt Inc., USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 6277841	B1	20010821	US 2000-517252		20000302
WO 2001064660	A1	20010907	WO 2001-US6394		20010228
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
EP 1259497	A1	20021127	EP 2001-916286		20010228
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JP 2003525282	T	20030826	JP 2001-563501		20010228
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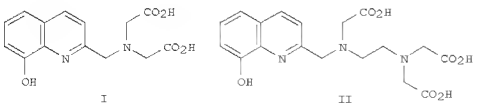
			WO 2001-US6394	W	20010228

OTHER SOURCE(S): MARPAT 135:189314
GI



I II

AB The present invention relates to novel ligands for forming metal complexes that absorb or fluoresce in the visible or near-IR (NIR) region of the electromagnetic spectrum, new complexes incorporating such ligands, process for preparing such complexes, and methods of imaging or therapy using such agents. More particularly, the present invention specifically pertains to novel metal complexes derived from quinoline based

L4 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)
heterocyclic N2O3, N3O3, N3O4, N3O5 and N2O5 ligands, and are useful as general imaging, diagnostic, or therapeutic agents employing optical, nuclear medicine, or magnetic resonance procedures. Thus, hydroxyquinoline ligands (I and II) and related compds. and their transition metal complexes were prepd.
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:733055 CAPLUS
DOCUMENT NUMBER: 131:345771
TITLE: Preparation of metal chelates as pharmaceutical imaging agents
INVENTOR(S): Marzilli, Luigi G.; Lipowska, Malgorzata; Hansen, Lory; Taylor, Andrew, Jr.
PATENT ASSIGNEE(S): Emory University, USA
SOURCE: U.S., 32 pp., Cont.-in-part of U.S. Ser. No. 643,413, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5986074	A	19991116	US 1997-993219	19971218
US 5955053	A	19990921	US 1996-643413	19960506
PRIORITY APPLN. INFO.:			US 1996-643413	B2 19960506

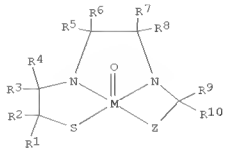
OTHER SOURCE(S): MARPAT 131:345771
AB The present invention relates to novel metal chelates, exemplified as technetium-99m or rhenium chelates, and to the process of preparing such metal chelates from corresponding ligands. These ligands and their corresponding metal chelates were synthesized to have a cysteinylethylene (EC) structure, a monothiourea (MTU) structure, or a dithiourea (DTU) structure. Thus, 99mTcO(CEMA) [H3CEMA = HSCH2CH(COOH)NHCH2CH2NHC(O)CH2SCH2Ph], was prepared and biodistribution studied for four isomeric forms of the complex (syn- and anti-, D and L). The present invention further relates to a pharmaceutical composition comprising a metal chelate, for example, a 99Tc-chelate, to the use of the composition for renal imaging and examination of renal function, and to a kit for preparing such a composition prior to use.
REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:606902 CAPLUS
DOCUMENT NUMBER: 131:251747
TITLE: Preparation of metal chelates of cysteinylethylene, thioacetamidethiourea, or dithiourea derivatives as pharmaceutical imaging agents
INVENTOR(S): Marzilli, Luigi Gaetano; Lipowska, Malgorzata; Hansen, Lory; Taylor, Andrew, Jr.
PATENT ASSIGNEE(S): Emory University, USA
SOURCE: U.S., 23 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5955053	A	19990921	US 1996-643413	19960506
US 5986074	A	19991116	US 1997-993219	19971218
PRIORITY APPLN. INFO.:			US 1996-643413	B2 19960506

OTHER SOURCE(S): MARPAT 131:251747
GI



I

AB The present invention relates to novel metal chelates, exemplified as 99mTc or Re chelates, and to the process of preparing such metal chelates from corresponding ligands. Claimed are metal chelates which have a cysteinylethylene (CE) structure I (R1-R10 = H, C1-4 alkyl, A-CO2H where A = C0-4; R5R6, R7R8, R9R10 = O, Z = CH2S, or 2-pyridyl, 2-pyrazinyl derivs., CH2NH, etc., M = Tc, Re, Cd, Pb, Zn, Hg, Ag, Au, Ga, Pt, Pd, Rh, Cr, V). The invention also provides metal chelates based upon a thioacetamidethiourea structure or dithiourea structure. General synthetic procedures for the ligands and for 99Tc and Re complexes are given in the examples with reaction schemes. The ligands need not exist in a stereoisomeric form. The present invention further relates to a pharmaceutical composition comprising a metal chelate, e.g., a 99Tc-chelate, to the use of the composition for renal imaging and examination of renal function, and to a kit for preparing such a composition prior to use.
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS

L4 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:630417 CAPLUS
DOCUMENT NUMBER: 125:275257
ORIGINAL REFERENCE NO.: 125:51473a,51476a
TITLE: Preparation of DTPA monoamide metal complexes as contrast agents
INVENTOR(S): Platzek, Johannes; Niedballa, Ulrich; Raduechel, Bernd; Mareski, Peter; Weinmann, Hanns-Joachim; Muehler, Andreas; Misselwitz, Bernd
PATENT ASSIGNEE(S): Schering A.-G., Germany
SOURCE: PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9626182	A1	19960829	WO 1996-EP733	19960221
W: AU, BY, CA, CN, CZ, FI, HU, JP, KR, MX, NO, NZ, PL, RU, SG, SK, UA, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
DE 19507819	A1	19960822	DE 1995-19507819	19950221
DE 19507822	A1	19960822	DE 1995-19507822	19950221
DE 19507822	B4	20060720		
AU 9649407	A	19960911	AU 1996-49407	19960221
EP 810990	A1	19971210	EP 1996-905778	19960221
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
PRIORITY APPLN. INFO.:			DE 1995-19507819	A 19950221
			DE 1995-19507821	A 19950221
			DE 1995-19507822	A 19950221
			WO 1996-EP733	W 19960221

OTHER SOURCE(S): MARPAT 125:275257
AB R2NCHR3CONR1R2 [R = CH2CH2N(CH2CO2R4)2; R1-R3 = H, (O-, CO-, NH-, etc.-interrupted)(cyclo)alkyl, phenylalkyl, etc.; R4 = 1 equivalent of a metal atom of Z = 12, 20-32, 39, 42-44, 49, 57-83] were prepared Thus, [(R4O2CCH2)NCH2CH2]2NCHMeCOR5 (I; R4 = CMe3, R5 = H)(preparation given) was amidated by bis(octyl)amine and the product saponified to give I [R4 = H, R5 = bis(octyl)amino](II). Data for in vitro relaxivity and descriptions of in vivo properties of II Gd complex Na salt were given.
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:72541 CAPLUS
DOCUMENT NUMBER: 120:72541
ORIGINAL REFERENCE NO.: 120:12963a,12966a
TITLE: Lipophilic metal complexes for heart imaging agents
INVENTOR(S): Green, Mark A.; Tsang, Brenda W.
PATENT ASSIGNEE(S): Purdue Research Foundation, USA
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9319787	A1	19931014	WO 1993-US3138	19930401
W: AU, BB, BG, BR, CA, CZ, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5324502	A	19940628	US 1992-861778	19920402
AU 9339731	A	19931108	AU 1993-39731	19930401
EP 637251	A1	19950208	EP 1993-909246	19930401
R: BE, DE, FR				
PRIORITY APPLN. INFO.:			US 1992-861778 A	19920402
			WO 1993-US3138 A	19930401

OTHER SOURCE(S): MARPAT 120:72541
AB Agents for imaging of myocardial tissues are prepared by forming lipophilic, cationic complexes of radioactive metal ions with metal chelating ligands comprising Schiff-base adducts of triamines and tetraamines with optionally substituted salicylaldehydes. The complexes of the invention exhibit high uptake and retention in myocardial tissues. Preferred 68Ga(III) complexes of the invention can be used to image the heart with positron emission tomog. Preparation of chelating agents and chelates is described, and biodistribution data are included for e.g. the 67Ga chelate with bis(4-methoxysalicylaldimino)-N,N'-bis(3-aminopropyl)ethylenediamine.
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1982:439392 CAPLUS
DOCUMENT NUMBER: 97:39392
ORIGINAL REFERENCE NO.: 97:6759a,6762a
TITLE: Amides of 4-oxo-5-amidohexanoic acid derivatives
INVENTOR(S): Gravestock, Michael Barry
PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK
SOURCE: Eur. Pat. Appl., 95 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 45161	A1	19820203	EP 1981-303270	19810716
EP 45161	B1	19840314		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
ZA 8104893	A	19820728	ZA 1981-4893	19810716
AT 6637	T	19840315	AT 1981-303270	19810716
AU 8173099	A	19820128	AU 1981-73099	19810717
AU 542662	B2	19850228		
FI 8102307	A	19820125	FI 1981-2307	19810722
DK 8103280	A	19820125	DK 1981-3280	19810723
NO 8102532	A	19820125	NO 1981-2532	19810723
JP 57075955	A	19820512	JP 1981-115444	19810724
EP 53017	A1	19820602	EP 1981-305490	19811120
EP 53017	B1	19850220		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AU 8177810	A	19820603	AU 1981-77810	19811124
JP 57188553	A	19821119	JP 1981-188272	19811124
PRIORITY APPLN. INFO.:			GB 1980-24305 A	19800724
			GB 1980-37651 A	19801124
			EP 1981-303270 A	19810716

OTHER SOURCE(S): MARPAT 97:39392
AB RXNR1CHR2X1CHR3CHR4CONR5CR6R7X2R8 [R = H, (un)substituted C1-15 alkyl, aryl, aryloxy, alkoxy, aralkoxy, (un)substituted C2-6 alkenyl, cycloalkyl, R9CONHCHR10 (R9 = alkyl, cycloalkyl, aryl; R10 = H, C1-5 alkyl, aralkyl, or common amino acid side chain); R1 = H, C1-5 alkyl, aralkyl; R2 = alkyl, alkenyl, aralkyl, aralkenyl, aryl, indolylmethyl; R3 = H, C1-3 alkyl; R4 = H, C1-5 alkyl, aralkyl; R5 = H, aryl, C1-5 alkyl, aralkyl; R6 = H, aryl, heterocyclic moiety, (un)substituted C1-5 alkyl; R5R6 = (un)substituted C2-5 alkylene or alkenylene or their oxa, thia, or aza derivs., R7 = H, C1-5 alkyl; R6R7 = C2-5 alkylene; R8 = OH, aryloxy, (un)substituted alkoxy, cycloalkoxy, (un)substituted NH2, arylthio; X = CO, CS, SO2, NHCO; X1 = CO, CH(OH), CS, C(:NR11) (R11 = H, C1-5 alkyl, aralkyl); X2 = CO, CH2], useful as antihypertensives (no data) due to their ability to inhibit angiotensin-converting enzyme, were prepared Thus, (RS,RS)-AcNHCH(CH2Ph)COCH2CHMeCO2H was condensed with H-L-Pro-OCMe3 by DCC/1-hydroxybenzotriazole in THF to give (RS,RS)-AcNHCH(CH2Ph)COCH2CHMeCO-L-Pro-OCMe.

L4 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN (Continued)

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---Logging off of STN---

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=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	64.46	297.78

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-11.48	-11.48

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NEWS 15 MAR 06 INPADOCDB and INPAFAMDB enhanced with new display formats
NEWS 16 MAR 11 EPFULL backfile enhanced with additional full-text applications and grants
NEWS 17 MAR 11 ESBIOBASE reloaded and enhanced
NEWS 18 MAR 20 CAS databases on STN enhanced with new super role for nanomaterial substances
NEWS 19 MAR 23 CA/CAplus enhanced with more than 250,000 patent equivalents from China
NEWS 20 MAR 30 IMSPATENTS reloaded and enhanced
NEWS 21 APR 03 CAS coverage of exemplified prophetic substances enhanced
NEWS 22 APR 07 STN is raising the limits on saved answers
NEWS 23 APR 24 CA/CAplus now has more comprehensive patent assignee information
NEWS 24 APR 26 USPATFULL and USPAT2 enhanced with patent assignment/reassignment information
NEWS 25 APR 28 CAS patent authority coverage expanded
NEWS 26 APR 28 ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS 27 APR 28 Limits doubled for structure searching in CAS REGISTRY
NEWS 28 MAY 08 STN Express, Version 8.4, now available
NEWS 29 MAY 11 STN on the Web enhanced
NEWS 30 MAY 11 BEILSTEIN substance information now available on

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